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QUESTIONS AND PROBLEMS IN ACCOUNTING

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QUESTIONS AND PROBLEMS IN ACCOUNTING

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PREFACE

This book consists of questions and problems in the principles of accounting, arranged according to topics. The grouping of material in chapters follows, in general, the manner of approach which is at present being widely used in university and college courses. The book is thus not limited to use with any particular text, but is adapted to the needs of various courses in accounting.

In the first four chapters the typical statements as published in the corporation manuals are presented in summary form. A study of these and of the accompanying questions and problems should serve to acquaint the student with the statements most widely used in business and the uses to which accounting statistics are put. Such an understanding of the general nature of a balance sheet and statement of income and expense before a study of the technique of the double entry system is undertaken is important.

The details of bookkeeping technique are next brought out through a series of questions and rather short problems, but without the use of laboratory "sets." It has been the experience of the authors that not enough is gained for the time expended in working out detailed manuals. As a general rule the "sets" are too long and contain constant repetition of a great many transactions and entries in which the methods involved are perfectly obvious to the student. The student's difficulties center about particular, intricate situations. Therefore, problems which emphasize such situations are productive of better results.

A number of chapters are presented which are designed to meet special needs. For example, Chapters XXIV and XXV are devoted to comparative data and the interpretation of the reports. These chapters should be helpful in emphasizing the use of accounting information as an aid in administration and control. Chapter XXVI, Ratios and Charts, and Chapter XXVII, Budgets, should serve in the same capacity. It is believed that accounting information may be presented in ways other than the usual reports and statements. Various possible ratios, and different graphic and diagrammatic presentations are therefore

suggested in these chapters. Since it is a part of the accountant's and business man's function to plan for the future, a chapter on Budgets is included.

One chapter is devoted to questions and problems pertaining to the federal income tax procedure. While these cannot cover a thorough treatment of this entire field, for which a specialized course is essential, yet they can give the beginning student a needed survey of the provisions of the law and the technical terms used.

It is believed, furthermore, that not enough effort is made to tie together closely related subjects such as business law and accounting. Important decisions bearing upon legal phases of accounting are being reached from time to time. The accountant and the business man should know the past decisions and should become acquainted with current decisions. Chapter XXXII is intended as an aid in this direction.

RUSSELL A. STEVENSON
R. EMMETT TAYLOR

CINCINNATI, OHIO,
MARCH, 1926.

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QUESTIONS AND PROBLEMS IN ACCOUNTING

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I. THE BALANCE SHEET

1. What are the three classes of data exhibited in the balance sheet of a business enterprise? Show in equation form the relation which exists between them.

2. Make a list of the various property items that would be required in some business with which you are familiar. What liabilities are likely to be incurred in obtaining these items?

3. A partnership has been operating a retail clothing store for three years. The original investment was $50,000. Assume the necessary items to prepare a possible balance sheet for the concern.

4. What is the difference between *liabilities* and *proprietorship?*

5. If you were called upon to prepare a statement of the condition of a business enterprise at a particular date, how would you proceed? Assume that the concern did not have a complete system of accounts.

6. The persons who furnish funds for the operation of a business are sometimes classified into two groups designated "insiders" and "outsiders." How are these interests classified on the balance sheet?

7. Explain why the liabilities and proprietorship items are placed on the same side of the balance sheet.

8. Various captions are used in current practice for the right hand side of the balance sheet, such as: *liabilities, liabilities and*

capital, liabilities and net worth, and *equities.* What do you understand to be meant by each of these titles? Which one do you consider as the best one to use as descriptive of the items listed on that side of the balance sheet?

9. "The two columns of a balance sheet are not independent classes of data. On the one hand are the various property items in the possession of the business concern while on the other are listed the various claims in or ownership of the same property items." Do you agree with the statement in quotation marks? Give reasons for your answer.

10. "Assets must always be equal to the liabilities and proprietorship." Is this statement true? Is it not true that liabilities are sometimes greater than the assets? If so, what happens to the proprietorship under such circumstances? Is there such a thing as negative proprietorship?

11. What effect would the overstatement of the value of an asset on the balance sheet have on the other side of the statement?

12. You discover that one of the customers' accounts listed on the asset side of a corporation's balance sheet is uncollectible and therefore cannot be considered as a valid asset. How would you make the necessary correction to present a correct balance sheet?

13. It is discovered that $1,000.00 worth of materials were overlooked when the inventories were taken in preparing the balance sheet of a business. State how the correction of this error would affect the various items on the balance sheet.

14. A corporation issued $100,000 par value of stock to the promoters for nothing. In order to make the totals of the balance sheet equal, an item of Goodwill $100,000 was placed on the asset side. Assuming that there was no reasonable ground for considering the goodwill as worth that amount, how would you correct the balance sheet?

15. The practice of issuing stock under the conditions mentioned in question 14 is generally called "watering the stock." Why does this expression accurately describe the operation?

16. In examining the records of a business you find that a creditor's invoice for $1,000.00 which had not been paid was omitted from the list of liabilities. How would the correction of this omission affect the balance sheet?

17. A certain corporation listed Notes Payable $100,000 on the liability side of the balance sheet. This represented notes which had been made out payable to a bank. At the time the balance sheet was taken interest had accrued in favor of the bank to the extent of $100.00 but this had not been noted in the liabilities. Explain how this should be handled in order to present an accurate statement.

18. On December 31, 1924, the wages which had accrued in favor of the employees of a manufacturing concern amounted to $50,000. These wages were not due until January 15, 1925. Should this fact be noted on a balance sheet for December 31, 1924?

19. A certain amusement park carries on the practice of selling coupons for its various devices in advance of its operating season. It had sold $100,000 worth of such coupons and received cash for them before the opening of its gates. How should this fact be shown on the balance sheet?

20. Select a published balance sheet for a business concern such as a manufacturing company, a mercantile establishment or a bank and explain what you understand by each of the items on the right hand side of the statement. The financial page of a newspaper usually contains a number of such reports.

21. On June 30, 1925, the business assets of J. P. Rose are as follows: cash, $1,600; merchandise, $15,800; furniture and fixtures, $1,200; delivery equipment, $830; securities owned, $5,300. In addition there is owed to him by various trade cutomers the sum of $2,000. He owes to various trade creditors the sum of $1,250; and his 60-day, 6% note at the First National Bank in the amount of $1,000, is due July 1.

Set up a balance sheet for the business as of June 30, 1925.

22. Classify the following items under the proper balance sheet headings: Land, $8,000; buildings, $35,000; patent rights,

$2,500; mortgage on land and buildings, $12,000; office equipment, $400; store equipment, $2,000; A, proprietor, $16,000; merchandise, $25,600; delivery equipment, $1,800; notes payable, $8,000; B, proprietor, $32,000; accounts receivable, $2,500; notes receivable, $400; miscellaneous accounts payable, $6,200; cash, $2,000, and accrued wages, $6,000.

23. The C & F Ice Company was organized January 1, 1924. The proprietors were A. B. Cook and John Forks. On December 31, 1924, the assets and liabilities of the firm were as follows: cash, $1,500; supplies, $6,500; office furniture, $900; notes payable, $300; creditors' accounts, $800; customers' accounts, $1,200; ice tickets sold in advance, $200.

(a) Prepare a balance sheet assuming that the partners have equal investments.

(b) If the partners had originally invested $2,500, how much profit did they make for the year 1924?

24. B. A. McKee is engaged in retailing radio equipment. His records on December 31, 1924, show the following balance sheet accounts:

Notes Receivable	$ 480
Merchandise Inventory	4,000
Due to creditors	
R. E. Atkins	200
W. L. Dickens	150
R. R. Clark	75
Z. L. Morgan	125
Due from Customers	
Henry Shoney	300
T. A. Barkow	175
King Cole	85
B. O. Clinton	225
Thomas Burton	115
Cash	450
Delivery Equipment	135
Furniture and Fixtures	85
Owes National Banking Company a note	100

(a) Make a report form of balance sheet as of December 31, 1924.

(b) Write a statement setting forth the advantages or disadvantages of placing customers' and creditors' accounts in the balance sheet.

25. You are employed in the credit department of the First National Bank. R. A. White, a retail dry goods merchant, submits the following balance sheet to the bank as a basis for a loan of $2,000:

R. A. White

Delivery Equip.	$ 3,000	R. A. White, Prop.	$36,500
Land	6,000	Notes Payable	2,500
Cash	2,400	Mortgage Payable	5,000
Mdse. Inventory	24,000	Accounts Payable	4,000
Fur. and Fix.	900		
Accounts Rec.	3,400		
Buildings	8,000		
Notes Rec.	300		
	$48,000		$48,000

The credit department of the bank is not at all satisfied with the form in which the balance sheet is presented.

You are asked to write a letter to R. A. White calling his attention to the defects in the form of his balance sheet, and suggesting how he might set up the report to bring out the comparisons desired by the bank.

26. J. B. Peters and D. B. Jones formed a partnership to conduct a small manufacturing business, each investing $10,000 in cash. A local banker loaned them an additional $10,000, accepting their joint note for one year at 6%. They utilized part of the funds thus obtained as follows: building, $7,000; machinery, $10,000; office equipment, $500; supplies, $200; stock of material, $5,000; delivery equipment, $2,000. A payment of $2,000 was made for the right to use a patented device in their manufacturing process. An additional $1,500 worth of material was purchased on open book account to be paid for in 60 days.

Prepare a balance sheet for the firm of Peters and Jones at the conclusion of the above mentioned transactions.

27. The balance sheet for the Johnson Cordage Co., a corporation, taken on December 31, 1924, is given on page 6.

The notes of the corporation are in the possession of the First National Bank, the bonds are all owned by Mr. E. B. Smith and the capital stock is owned outright by D. W. Johnson. How would these equities in the Johnson Cordage Company be rep-

resented on the balance sheets of the three parties? What general comment have you to make?

Assets		*Liabilities and Capital*	
Cash	$ 11,200	Notes Payable	$ 3,200
Notes and Accts. Receivable	14,000	Bonds	65,000
Materials and Supplies	55,000	Capital Stock	100,000
Tools and Machinery	33,000		
Factory Buildings	35,000		
Land	20,000		
	$168,200		$168,200

28. The following is a list of the balance sheet items of the Ajax Radio Corporation on December 31, 1924: Cash, $9,000; notes receivable, $15,000; accrued interest on notes receivable, $500; notes payable, $50,000; accrued interest on notes payable, $400; accounts receivable, $45,000; inventory raw materials, $175,000; inventory partly finished goods, $30,000; inventory finished stock, $25,000; accounts payable, $85,000; office fixtures, $6,000; machinery and equipment, $175,000; buildings, $75,000; goodwill, $30,000; bonds payable, $100,000; capital stock, $200,000; accrued wages, $1,500; and surplus, $148,600.

Rearrange these items in the form of a balance sheet. What is the stockholders' equity?

29. An examination of the properties of the Ajax Radio Corporation (problem 28) discloses the fact that the machinery and equipment has depreciated by $6,000; the buildings by $4,500; and that $2,000 of the accounts receivable are worthless and uncollectible.

Restate the balance sheet taking into consideration the facts mentioned.

30. You are considering the purchase of one-half the stockholders' interests in the Ajax Radio Corporation (problem 28), (a) What price would appear to be reasonable on the basis of the information available? (b) What would be the price after making the adjustments of problem 29? What would be the price if it were discovered that the goodwill were worthless?

31. The following is a balance sheet of a certain corporation engaged in the lumber business. This statement was copied

directly from the report made by the officers to the stockholders. This is the form in which annual statements are often published in financial papers.

Assets		*Liabilities*	
Real Estate	$ 320,579	Capital Stock	$2,697,000
Timber and Timber Lands	2,557,095	Bonded Debt	475,000
Saw Mill Plant	57,857	Accounts Payable	359,974
Accounts Receivable	1,347,659	Surplus	1,939,528
Merchandise	251,572		
Stocks in Other Companies	875,372		
Cash	61,368		
	$5,471,502		$5,471,502

(a) Rearrange the items in a more convenient form for comparative purposes.

(b) Explain what you understand to be meant by each item in the statement.

(c) What is the stockholders' equity?

32. The following is a list of the items which were included in the balance sheet of a packing company for December 31, 1923.

Land, buildings, etc., $1,461,436; Inventories, $792,208; Capital Stock, $1,000,000; Cash on hand, $223,795; Securities owned, $200,000; Funded debt, $500,000; Accounts and notes receivable, $211,207; Notes payable, $738,000; Prepaid expense items, $90,447; Accounts payable, $22,045; Salaries accrued, $18,429; Surplus, $700,619.

(a) Rearrange this list in the form of a balance sheet.

(b) What was the stockholders' equity as shown by the balance sheet?

33. The following list of items comprised the balance sheet of a large manufacturer of tacks on December 31, 1923: Real Estate, buildings, plant, etc., $2,737,346; Goodwill and patents, $261,091; Inventories, $987,659; Investments, $1,925; Cash, $64,028; Bills and accounts receivable, $186,506; Deferred assets, $39,451; Accounts payable, $64,242; Notes payable, $350,000; Accrued liabilities, $13,365; Capital stock and surplus, $3,850,399.

(a) Restate these items in a balance sheet report form.

(b) Suppose that the plant had depreciated by $700,000 and that this fact had not been recognized in the valuations given. Restate the balance sheet once more making the necessary corrections.

34. A number of the banks have adopted the policy of presenting the statements called for periodically by the Comptroller of the Currency and the state banking superintendents, in a simplified form. The following statement by the Citizens National Bank and Trust Company of Cincinnati was prepared in this readily understandable form:

A BANK STATEMENT EASILY UNDERSTOOD [1]

Simplified form of the sworn statement that we gave to the United States Comptroller of the Currency, October 10, 1924.

Resources

We have loaned to our customers for use in their businesses and for other legitimate needs, the sum of............	$ 9,710,823.26
Through error, customers overdrew their accounts to the extent of	95.57
We own United States Government Securities worth.......	2,438,520.84
We own other bonds and securities worth................	1,051,466.75
Our banking house and real estate are carried on our books at	371,000.00
The cash we have on hand and the amount due us from the Federal Reserve Bank equal	2,442,511.74
We have on deposit with banks in New York, Chicago, Boston, and other cities, payable on demand..............	1,598,394.30
Total of our Resources	$17,612,812.46

Liabilities

Deposited with us by individuals, firms and corporations doing business in Cincinnati and elsewhere............	$ 9,690,519.78
Deposited with us by other banks and trust companies.....	1,552,235.37
Deposited with us by the United States Government......	503,997.82
We have in circulation bank notes (paper money) bearing our name and amounting to	1,600,200.00
Total of our Liabilities	$13,346,952.97
Leaving a balance over and above our Liabilities.........	$ 4,265,859.49

[1] Certain differences in form may be noted between the various examples of financial statements. There is no established uniform practice with regard to punctuation, use of capital letters and general arrangement in published statements. In making use of corporation reports for illustrative material in this book, the forms have been reproduced to conform with the original versions.

This balance represents the depositors' margin of safety.
The amount is carried on our books as follows:

Capital	$ 2,000,000.00
Surplus	1,650,000.00
Undivided Profits	615,859.49
Total	$4,265,859.49

(a) Would you call this a balance sheet?

(b) Restate the balance sheet using the accounting terms which are generally associated with a balance sheet statement.

(c) Why is the statement as published more easily understood than the regular report?

35. Most banks submit their statements for publication in terms of account titles. For example, the statement of financial condition of another bank which was published at the same time as the one presented in Problem 34, is shown below In this case the technical terms of banking practice are used.

Report of the Condition of

THE UNION TRUST COMPANY

Resources

Loans on Real Estate	$ 4,083,126.11
Loans on Collateral	5,576,010.25
Other Loans and Discounts	1,657,712.91
Overdrafts	981.67
U. S. Bonds and Securities	3,281,926.34
State, County and Municipal Bonds	745,668.73
Other Bonds, Stocks and Securities	7,956,177.62
Banking Houses and Lots	2,234,599.10
Real Estate other than Banking Houses	2,500.00
Cash Items	7,582.15
Lawful Reserve with Federal Reserve Bank	1,215,250.02
Stock of Federal Reserve Bank (50% of Subscription)	120,000.00
Items with Federal Reserve Bank in process of Collection (not available as reserve)	81,033.63
Exchanges for Clearing	402,680.62
Foreign Money	12,117.50
Net amount due from Banks and Bankers and cash in vault	1,370,446.93
Items in transit	104,372.67
Letters of Credit—Customers' Liability	12,342.00
Total	$28,864,528.25

Liabilities

Capital Stock paid in		$ 1,000,000.00
Surplus		3,000,000.00
Undivided Profits less expenses, interest and taxes paid		634,569.75
Reserved for Taxes		26,118.31
Reserved for Interest		154,408.53
Individual Deposits subject to check	$ 5,626,177.56	
Demand Certificates of Deposit	10,602.44	
Cashier's Checks outstanding	535,301.90	
Certified Checks outstanding	30,022.30	
Net Amount due to Banks and Bankers	158,538.88	
Time Certificates of Deposit	2,145,916.53	
Savings Deposits	14,840,078.98	
U. S. Postal Savings	33,744.39	
Trust Deposits (uninvested)	656,706.68	
		24,037,089.66
Letters of Credit executed for customers		12,342.00
Total		$28,864,528.25

(a) List the items which are shown under the heading "Liabilities" into two groups representing the equities of the outside parties and those of the stockholders.

(b) What do you understand by each of the items under the caption "Resources"?

(c) What main difference may be noted between the assets in the bank statement and those of an industrial concern?

II. BUSINESS OPERATIONS

1. Explain what you understand by business operations as viewed from the standpoint of the balance sheet statement.

2. The purpose of business operations is to make a profit. A comparison of balance sheets taken at the beginning and end of a year should show how effective the management has been in producing profits. Explain how this information can be obtained from the two balance sheets.

3. The difference between specific items on a balance sheet of a company at the end of a year as compared with the same ones at the beginning of a year is explained by a great many separate transactions which occurred during the year. In measuring the results of the year's operations, however, it is proper to examine the changes in total as though the different items were altered in one composite operation. Do you agree that this is a proper assumption in the analysis of balance sheets? Give reasons for your answer.

4. The fundamental balance sheet equation is expressed as follows: Assets = Liabilities + Proprietorship. Using this equation as a basis, explain every possible cause for an increase in the balance sheet totals at the end of a year over those for the same company at the beginning of the year.

5. A very common expression used to convey the information that a company is successful and therefore making a profit is that "the so and so company is making money." This expression is entirely proper if it is understood but it frequently leads to confusion on the part played by the cash item in measuring profit. Show that it is possible and reasonable for a company to report a substantial profit over a period even though the cash item is considerably lower at the end of the period than at the beginning.

6. Following your answer to question 5 explain what might have been done with the cash to cause the condition mentioned.

7. Under what conditions might the totals of the balance sheet decrease at the same time that profits have been earned?

8. Enumerate the possible causes for a change in the proprietorship item (both an increase and a decrease) on a balance sheet over a period of time.

9. Prepare a statement in the form of an equation which will give the exact amount of profits earned over a period. The information given on which this statement is based is as follows: two balance sheets, one at the beginning and the other at the end of the period; the amount of the proprietors' new investments during the period and the amount of the proprietors' withdrawals or dividends during the period.

10. The amount of the fixed assets—buildings and machinery—is less at the end of a year than at the beginning. What other changes would you expect to find on the balance sheet? Why?

11. The totals of the balance sheet are the same at the end of the year as at the beginning. The current assets—cash, accounts receivable and inventories—have decreased. The liabilities remain unchanged and the proprietors have not invested any new capital. Explain what financial operations must have occurred.

12. At the beginning of the year the inventories are stated on the balance sheet at $45,000,000. At the end of the year they are listed at $20,000,000. All other assets and liabilities remain essentially the same. What was the effect upon proprietorship? Under what operating conditions would such a situation arise?

13. The totals of the balance sheet prepared at the end of the year are greater by $2,000,000 than at the beginning. No profits have been withdrawn and the proprietorship account remains unchanged. What facts pertaining to the year's operations do these conditions disclose?

14. A certain manufacturing company published a balance sheet which disclosed an increase in the totals for the year 1924 of $3,000,000. The land increased $5,000,000 and the current assets decreased $2,000,000. All other assets and liabilities remained practically unchanged. No new capital was supplied by the stockholders and no dividends were paid. What was the profit for the year? What was the probable source of the profit?

15. A manufacturing company presented a balance sheet to its stockholders which showed the surplus figure on December 31, 1924 at $2,000,000 as compared with $1,000,000 on January 1, 1924. On the same balance sheet Goodwill was listed at $2,000,000 at the later date whereas no such item appeared at the beginning of the year. Is there any connection between these two changes?

16. The largest item on the liability side of an insurance company's report is called *reserve*. What do you understand that this represents? What would be the explanation for an increase in this item over a year?

17. The term *surplus* is frequently confused with *cash* on the part of those not familiar with accounting statements. Write a statement which will serve to clear up this point.

18. Do you see any objection to the use of the term *surplus fund* on the liability side of a balance sheet?

19. In the following statement the balance sheet information for a manufacturing concern at the beginning and end of 1924 is listed:

Assets	*Jan. 1*	*Dec. 31*
Real Estate and Buildings	$ 64,000	$ 67,000
Machinery and Equipment	48,700	33,300
Goodwill	25,000	25,000
Materials and Finished Goods	59,500	73,250
Notes Receivable	15,000	18,000
Accounts Receivable	20,000	15,000
Investments	10,000	25,000
Cash	12,000	11,150
	$254,200	$267,700

Liabilities		
Bonds	......	$ 25,000
Accounts Payable	$ 14,000	16,000
Notes Payable	26,000	1,000
Capital Stock	200,000	200,000
Surplus	14,200	25,700
	$254,200	$267,700

(a) What significant changes in the financial condition of the company during 1924 are brought out by these statements?

(b) Assuming that a total of 8% in dividends was declared and paid during the year, what were the total profits?

(c) The statements show an increase in surplus but a decrease in cash. Explain how this situation was possible.

20. The Jaspers Manufacturing Company submitted balance sheets on December 31, 1923 and 1924 as follows:

Assets	*1923*	*1924*
Real Estate	$ 150,000	$ 150,000
Building	148,553	121,614
Machinery	428,968	510,897
New Factory Construction	215,500	859,684
Inventory—Materials, etc.	616,520	653,553
Accounts Receivable	210,000	225,000
Cash	181,228	297,627
	$1,950,769	$2,818,375

Liabilities		
Common Stock	$ 600,000	$1,200,000
Preferred Stock	......	300,000
Bonds	450,000	800,000
Notes Payable	25,000	150,000
Accounts Payable	24,505	99,760
Surplus	851,264	268,615
	$1,950,769	$2,818,375

(a) State the possible causes for the changes in the various items on the statements.

(b) Assume that the stockholders received a 100% stock

dividend (to explain the increase in the common stock item) and a cash dividend of $30,000. What were the profits for the year?

(c) How were the funds obtained from the new issues of preferred stock and bonds used?

21. The following are the balance sheets of the King Manufacturing Company for the years ending December 31, 1924 and 1925.

Assets	*1924*	*1925*
Real Estate	$150,000	$150,000
Plant	150,000	130,000
Machinery	90,000	86,000
Raw Materials	41,014	37,642
Finished Goods	48,687	62,358
Notes Receivable	50,300	40,042
Accounts Receivable	21,300	20,042
Cash	20,350	14,129
	$571,651	$540,213

Liabilities		
Capital Stock	$300,000	$300,000
Bonds	100,000	100,000
Notes Payable	54,010	16,919
Accounts Payable	63,101	37,294
Surplus	54,540	86,000
	$571,651	$540,213

(a) Explain how it was possible to show an increase in surplus at the same time that the total assets decreased.

(b) How were the assets used to cause the reduction in total?

(c) Was the financial condition of the company impaired or not? Give reasons for your answer.

(d) Give possible reasons for all changes shown in the statements.

22. The stockholders of the Goodwill Manufacturing Company failed to receive any dividends in 1924. In part explanation for not declaring dividends, the board of directors sent to

the stockholders the following balance sheets for December 31, 1923 and 1924:

Assets	*1923*	*1924*
Patents and Goodwill	$3,256,678	$3,316,801
Real Estate and Buildings	783,053	794,574
Machinery and Tools	635,731	655,794
Materials and Finished Goods	886,987	878,346
Investments (Bonds Owned)	100,000	100,000
Cash	59,119	52,845
Accounts Receivable	264,336	334,459
Insurance (Prepaid)	9,093	6,048
Deficit	......	6,088
	$5,994,997	$6,144,955

Liabilities		
Capital Stock	$4,500,000	$4,500,000
Bonds	1,125,000	1,117,000
Notes Payable	300,000	425,000
Accounts Payable	65,779	102,955
Surplus	4,218	......
	$5,994,997	$6,144,955

(a) To what extent does this report explain the action of the directors in withholding dividends?

(b) What were the profits for the year?

(c) It is discovered that the buildings, machinery and tools were valued at cost. These items had depreciated by $75,000 up to December 31, 1923 and by $100,000 at the end of 1924. Correct the balance sheets using this information.

(d) What was the stockholders' equity after making the corrections in (c)?

(e) Assuming that operations are likely to continue in the future about the same as for 1924, what action would you advise the stockholders to take?

23. The following balance sheets were taken in practically the form given here from the published statements of a well known manufacturing company. A few minor alterations were made in order to clear up some doubtful points for problem purposes.

Assets	*1923*	*1924*
Patents and Goodwill	$14,000,000	$14,000,000
Plant and Machinery	11,142,019	11,240,230
Materials and Supplies	7,502,037	8,828,582
Notes Receivable	311,240	440,254
Accounts Receivable	1,177,603	1,077,848
Cash	590,769	739,111
Prepaid Insurance, etc.	80,976	103,052
	$34,804,644	$36,429,077

Liabilities	*1923*	*1924*
Common Stock	$ 8,750,000	$ 8,750,000
First Preferred Stock	9,215,000	9,215,000
Second Preferred Stock	6,535,000	6,535,000
First Mortgage Bonds	6,126,000	6,412,000
Notes Payable	453,000	1,806,200
Accounts Payable	220,033	600,344
Surplus	3,505,611	3,110,533
	$34,804,644	$36,429,077

(a) How profitable were the operations from the standpoint of the common stockholders? Assume that no dividends were paid on the common stock but that all preferred dividends were paid.

(b) What is your opinion of the valuation of Goodwill based on the statements submitted?

(c) If you were informed that 1924 had been an "off year" in the industry would your answer to (b) be changed?

(d) If you assumed that the Goodwill and Patents were worthless, what would be the equity of the common stockholders?

24. The following are the balance sheets of a gas company for December 31, 1922 and 1923 as published in Moody's Analysis of Investments—Public Utility Section.

Assets	*1923*	*1922*
Property, Equipment, etc.	$2,943,716	$2,610,027
Investments	375,613	380,469
Materials and Supplies	96,595	59,450
Cash	26,600	188,494
Bills and Accounts Receivable	56,182	44,805
Other Assets	1,045	1,092
	$3,499,751	$3,284,337

Liabilities

Capital Stock	$1,000,000	$1,000,000
Bonded Debt	1,536,000	1,536,000
Current Liabilities	117,365	85,247
Accrued Liabilities	55,728	97,018
Reserves	386,808	291,832
Surplus	403,850	274,240
	$3,499,751	$3,284,337

(a) What were the profits of the company assuming that 6% dividends had been paid?

(b) There was an increase of over $300,000 in the property and equipment whereas the total of the assets increased only a little over $200,000. Where did the additional $100,000 come from?

(c) What do you understand by the term "Reserves" on the liability side of the balance sheet?

25. The balance sheet of Smith & Peters on December 31, 1923 was as follows:

Assets		*Liabilities*	
Store Fixtures	$ 3,000	J. Smith, Capital	$15,000
Merchandise	22,000	R. Peters, Capital	15,000
Accounts Receivable	18,000	Notes Payable	5,000
Prepaid Items	200	Accounts Payable	12,700
Cash	4,800	Accrued Interest	300
	$48,000		$48,000

On December 31, 1924, the balance sheet was as follows:

Assets		*Liabilities*	
Store Fixtures	$ 2,800	J. Smith, Capital	$17,200
Merchandise	24,000	R. Peters, Capital	17,600
Accounts Receivable	21,000	Notes Payable	5,300
Prepaid Items	300	Accounts Payable	10,800
Cash	2,800		
	$50,900		$50,900

(a) Assuming that the partners have withdrawn no funds and made no new investments during the year, what was the net profit for the year 1924?

(b) Assuming that Smith withdrew $1,500 and Peters $1,200 during the year, what was the profit?

(c) Assuming all conditions the same as in (a) except that Accounts Receivable were $15,000 and Notes Payable $2,000, answer the same question.

(d) Assuming conditions as in (b) except that Cash stands at $800 and J. Smith, Capital at $15,200, answer the same question.

(e) Assuming conditions the same as in (a) except that Cash is $800 and Merchandise is $22,000, answer the same question.

(f) What general conclusion can you draw from this series of questions?

26. The Johnson Manufacturing Company submitted the following balance sheets to its stockholders for the years ending December 31, 1923 and 1924:

Assets	*1924*	*1923*
Real Estate and Buildings	$ 142,799	$ 135,424
Machinery and Equipment	320,323	302,052
Accounts Receivable	56,956	26,300
Materials and Finished Goods	558,891	661,699
Cash	45,763	29,153
Deficit	192,796	170,412
	$1,317,528	$1,325,040

Liabilities		
Common Stock	$ 650,000	$ 650,000
Preferred Stock	650,000	650,000
Notes Payable	8,500	16,600
Accounts Payable	9,028	8,440
	$1,317,528	$1,325,040

(a) What were the profits for the year 1924?

(b) What is the significance of the deficit item on the asset side of the balance sheet?

(c) What was the common stockholders' equity on December 31, 1924?

(d) What advice would you give to a common stockholder who was offered $40.00 per share ($100.00 par) for his stock?

III. BALANCE SHEET ACCOUNTS

1. In the problems of the preceding chapter the results of business operations were measured by comparing the changes in balance sheet items over a considerable period of time, a year in most cases. It would be proper for illustrative purposes to shorten this period to a month, a week, a day, or even to the individual business transaction. Show how this fact serves as a basis for the construction of the balance sheet accounts.

2. Every business transaction has an effect upon some of the balance sheet items but the fundamental equation is not disturbed.

Show that this statement is true by stating the effect of every possible *type* of transaction on the balance sheet classes.

3. Separate accounts for the various balance sheet items are maintained because of the difficulties encountered in registering all operations directly in the balance sheet. What are the difficulties which would be encountered in altering the balance sheet after each transaction?

4. "An account is a convenient device for summarizing positive and negative data pertaining to balance sheet items." (a) Is this an accurate description of a balance sheet account? (b) Illustrate how the data are marshalled in the various classes of accounts.

5. (a) Explain how the asset, liability and proprietorship accounts are constructed. (b) What information should be shown by these accounts?

6. The conventional two-column account is often called the "T" account form. (a) Why does this term appear particularly apt in describing the account? (b) Explain why the parallel column form is more convenient than other possible arrangements?

7. Give a classification of transactions in terms of asset, liability and proprietorship facts. Illustrate each type.

8. What do you understand by the terms *debit* and *credit* as used in modern accounting?

9. Show that in the recording of each transaction the debit entries must be equal to the credit entries in amounts.

10. The following are so-called rules for debit and credit. Discuss each of the statements critically.

(a) Debit that account or person which is entrusted with responsibility; credit that account or person which acquits itself of responsibility.

(b) Debit that which comes into the business; credit that which goes out.

(c) Debit that which receives value; credit that which gives up value.

(d) Debit indicates facts favorable to the proprietor; credit indicates facts unfavorable to the proprietor.

(e) The term *debit* always indicates that the person or account debited has assumed the position of *debtor* to the business; *credit* always indicates that the person or *account* credited has thereby assumed the position of creditor.

11. Construct a general rule for debit and credit that will cover all types of transactions in terms of balance sheet classes.

12. Make a list of the common transactions which occur frequently in some business with which you are familiar and state the effect of each upon the balance sheet accounts.

13. For each of the following transactions state the effect upon the balance sheet accounts: (a) Receipt of cash from a customer to apply to his account; (b) payment of cash to a creditor to apply on account; (c) purchase of raw materials to be paid for in sixty days; (d) borrowing of cash from a bank on a promissory note; (e) investment of new funds in the business by stockholders; (f) payment of dividends to stockholders; (g) purchase of new equipment for cash; (h) the loss of an uninsured building by fire; (i) the payment of income taxes to the government.

14. The conventional method of keeping accounts based upon the balance sheet statement is called "double entry." Does this mean that two entries must be made for each transaction? What is the significance of the term "double entry"?

15. Explain the significance of the debit and credit entries in each of the following accounts: (a) Real Estate; (b) Buildings; (c) Bonds; (d) Accounts Payable; (e) Materials; (f) Accounts Receivable; (g) Cash; (h) Insurance; (i) Supplies; (j) Capital Stock; (k) Surplus; (l) Notes Payable; (m) Investments.

16. State the names of the accounts to be debited and credited for each of the following transactions:

(1) New machinery is purchased for cash $2,000.

(2) Merchandise is purchased on account $2,500.

(3) Cash is obtained through the issue of bonds $50,000.

(4) The company is presented with a factory site worth $75,000 by the Chamber of Commerce.

(5) The sum of $1,500 is borrowed from the bank on a promissory note.

(6) A customer pays $200 on his account.

(7) Capital stock is issued for cash $25,000.

(8) Dividends are paid to stockholders $10,000.

(9) A building valued at $20,000 is lost by fire, insurance to the extent of $15,000 is collected.

(10) Bond holders accept $10,000 in capital stock for an equal amount in bonds.

17. The balance sheet of the business of A. B. Rawson on January 1, 1924 was as follows:

Assets		*Liabilities*	
Cash	$ 3,000	Mortgage	$15,000
Merchandise	15,000	Notes Payable	5,000
Accounts Receivable	2,500	Accounts Payable	3,000
Buildings	20,000	A. B. Rawson, Capital	37,500
Real Estate	15,000		
	$55,500		$55,500

The following transactions occur during January: Goods are sold on account, $1,800 and for cash, $2,600. Customers gave promissory notes to apply on accounts, $800. Cash was collected

from customers on accounts, $2,200 and on promissory notes, $1,500. Merchandise was purchased on account, $2,000. Cash was paid to creditors on account, $3,000 and on notes, $2,500. Cash was borrowed from the banks on promissory notes, $2,000. An addition to the building was paid for by increasing the mortgage $5,000. Various expenses of operating the business were paid for in cash, $1,000. The value of goods on hand at the end of January was $14,600.

Open the accounts shown on the balance sheet, record the summarized transactions and prepare a new balance sheet as of January 31.

18. A. B. Lenney exhibits the following balance sheet at the beginning of an accounting period:

A. B. Lenney

Balance Sheet. December 31, 1924

Cash	$ 5,000	Accounts Payable	$ 8,000
Accounts Receivable	10,000	Notes Payable	5,000
Notes Receivable	3,000	Mortgage Payable	4,000
Merchandise Inventory	20,000	A. B. Lenney	47,000
Furniture and Fixtures	2,000		
Delivery Equipment	4,000		
Building	8,000		
Land	12,000		
	$64,000		$64,000

During the month of January, 1925, there were the following transactions:

1. Merchandise was sold for cash for $1,500, a note of $750 and on account $750. The cost of the merchandise was $2,000.
4. Damages of $500 occurred to the building.
7. Inventory of $1,000 was purchased and a note given for the amount.
10. A note for $500 was given in exchange for an account.
15. A truck was sold for $500.

(a) Open the accounts.
(b) Record the transactions in the accounts.
(c) Make a balance sheet for January 31, 1925.

19. P. A. Kemper, previous to January 1, 1924, had kept incomplete records. You are asked to start a set of books for him. You find that he has the following assets and liabilities:

Cash, $1,000; merchandise inventory, $4,000; office furniture, $600; delivery equipment, $200; accounts payable, $3,000; notes receivable, $100; notes payable, $600, and accounts receivable, $4,000.

During the month of January there were the following transactions affecting the balance sheet accounts:

1. Kemper invested $2,000.
3. Bought furniture and fixtures for $400.
5. Received a note of $100 on account.
7. Received cash of $400 to apply on account.
10. Withdrew for personal use $10.
12. Purchased typewriter for $50.
15. Received $300 in payment of customer's account.
18. Paid a note of $100.
20. Increased his investment by $500.
25. Paid a creditor on account $150.

(a) Prepare an account form of balance sheet as of January 1, 1924.

(b) Open the accounts called for in the balance sheet.

(c) Record the transactions in the proper accounts.

(d) Make a report form of balance sheet for January 31, 1924.

20. The following information is taken from the books of Wilson & Nelson on June 30, 1925:

Cash, $3,600; notes receivable, $600; accounts receivable, $6,400; merchandise inventory, July 1, 1924, $9,600; furniture and fixtures, $1,200; delivery equipment, $2,000; buildings, $8,000; land, $4,000; notes payable, $2,800; accounts payable, $5,200; J. R. Wilson, capital, $13,840; T. A. Nelson, capital, $12,760; sales, $72,000; merchandise purchased in July, $68,000; selling expenses, $2,480, and other expenses, $3,720.

The merchandise inventory of June 30, 1925, is $16,000. An allowance for uncollectible accounts of 2% of accounts receivable is to be set aside.

The following allowances for depreciation are to be made: On furniture and fixtures 10%, on delivery equipment 20%, on buildings 5%.

Select the required accounts from the above list and make an account form and a report form of balance sheet.

Divide the proprietorship between the two partners, assuming that profits are to be shared equally.

21. The business of Carlton Moore had the following transactions:

1. Carlton Moore invested $10,000.
2. Purchased furniture and fixtures of $100 and paid for them with a note.
3. Merchandise of $300 was disposed of for cash.
4. Moore was unable to pay an account of $300 so he gave a note.
5. Withdrew $1,000 from the business.
6. Paid cash of $500 for an additional room to his building.
7. R. A. Ambrose paid his account of $150.
8. Paid rent on a warehouse in advance for $75.
9. Sold merchandise on account for $400.
10. Withdrew $10 for personal use.
11. Moore mortgaged his land and building for $1,000.
12. Purchased delivery truck for $3,000 giving a note for half and cash for half.
13. Land to the value of $1,000 was sold for cash.
14. Cash of $1,000 and a note of $1,000 were received for sales of $2,000.

Draw up a large T account and record the above information showing the effect upon assets, liabilities and proprietorship, as:

Asset, cash increased......	$10,000	1. Proprietorship, Moore, Capital increased.....	$10,000
Asset, F and F increased..	100	2. Liabilities, Notes Payable increased	500

22. What would be the effect of the following transactions upon the balance sheet accounts?

The proprietor, X, gives $100 to the Red Cross; the proprietor invests $5,000 in the business; the river washes away one acre of his land which is valued at $200 an acre; a customer pays his account of $200; X gives a note for $500 in cancellation of an account; the city gives X five acres of land as an inducement to stay within its boundaries; a clerk absconds with $100; X purchases a year's insurance for $1,000; the proprietor pays an

accrued payroll; he borrows $1,000 from the bank and gives a 6% note; a customer pays $500 in settlement of an account; materials to the amount of $100 are taken from the storeroom for manufacturing purposes; furniture and fixtures are paid for with cash of $250, and a note for the same amount; a new room costing $750 is added to the building; X withdraws $100 from the business; a mortgage of $1,000 is paid; a customer is unable to pay his account so he gives a 6% note for $600; a friend donates $1,000 cash to the enterprise; it costs X $100 to obtain a patent; a delivery truck is sold for $750.

23. What accounts should be debited and credited for each of the following transactions and why?

A. J. Thompson buys business of competitor for $3,000. He pays $2,500 cash for stock and goodwill and assumes a note for $500. Goodwill is estimated at $300; pays for erection of additional room to building, $800; gives a 30-day note for $110 to creditor to apply on account; reduces his investment in business by withdrawing $3,000 in cash; depreciation of plant to amount of $600 is recognized; a patent is purchased for $5,000 but Thompson thinks it might be worth $10,000; store and fixtures are bought, paying cash of $7,000 and giving a note for $2,000. The value of the fixtures is $800; a machine is bought for $500 cash and $500 in notes. Freight of $80 is paid and labor cost of installation, to be paid later, is $40; insurance of $1,000 is purchased; Wilcox settles his account of $2,000 with Thompson. He is allowed a discount of 2%; Thompson pays an account of $500 he owes Richard. He is allowed a discount of 2%. Dividends of $5,000 have been declared and paid by the directors; office supplies are purchased, for cash $250, note $100, on account $50; Thompson withdraws $50 for personal use.

IV. INCOME SHEET ACCOUNTS

1. "The necessity for expense and revenue accounts (income sheet accounts) arises out of the fact that, although the kinds and amounts of assets received when a sale is made (cash or accounts receivable) are definitely known, the values of the structures, commodities, and services which have expired, and have disappeared from the business as a part of the finished goods, are not ascertainable until a later date."

Explain fully what is implied in this quotation and show that the statement is true.

2. "*Net profit* is an increase in proprietorship resulting from business operations; *sales* or *gross revenue*, therefore, may be considered as a *gross* increase in proprietorship."

(a) Is the conclusion arrived at in the quotation logical?

(b) Just what do you understand by the term gross revenue?

3. *Gross revenue* is always credited with the amount of sales. Why is this so? What account (or accounts) is debited concurrently and why?

4. "Gross revenue is a credit item. This may be explained by the fact that revenue is composed of two elements in the balance sheet equation, viz., subtractions from assets and addition to proprietorship. Since both of these elements are credits their sum is likewise a credit."

Is the explanation in the quotation adequate?

5. Expenses are debit items. What fundamental characteristic of expenses explains this fact?

6. "It is the consumption of assets incident to business operations that constitute expense. An asset must be *acquired* before it can be *consumed* in operations. Therefore all purchases must pass through two stages, viz., first, as additions to assets at date

of purchase; and second, as expenses when the items have been used up."

(a) Is the conclusion in the third sentence of the quotation valid?

(b) Is it possible for some purchases to pass through the two stages practically simultaneously? Explain and illustrate.

7. What accounts are concurrently credited when Expense is debited?

8. "All assets with the exception of land and some intangibles ultimately pass into the expense category."

Argue for or against the validity of this statement.

9. Expenses may be grouped into two broad classes, viz., depreciation of *fixed* assets and consumption of *current* assets.

Give illustrations of both types of expenses.

10. Gross revenue may be considered as a temporary credit awaiting certain offsetting debits which will be used in arriving at the *net* figure.

(a) Just what is meant by this statement?

(b) What is the significance of the *net* figure referred to?

11. "Net revenue is the excess of gross revenue or sales over expenses. Expenses are the amounts of assets consumed in producing the products or services sold. Net revenue therefore represents the return on the total capital employed in the business regardless of the sources from which it was obtained. Viewed in this way net revenue includes the return to the bondholders and other creditors as well as to the proprietors."

(a) Do you agree with the statement?

(b) How should interest paid to bondholders be charged in the accounts?

12. Income taxes are assessed on the basis of net revenue. Should these be treated as expenses or as deductions from net revenue?

13. "There are two important *net revenue* figures, viz., first, net revenue from operations; second, net revenue after deductions for taxes, interest and dividends." Why is this distinction important?

14. The income sheet is often called *profit and loss* or *loss and gain.* This would indicate that the debits are *losses* and the credits are *profits* or *gains.* Is this a proper interpretation of the expense and revenue item?

15. State fully the distinction between an expense and a loss.

16. Is it possible for a concern to show a net revenue and at the same time to have a net loss for the period? Illustrate.

17. Dividends received on stocks owned do not answer to the definitions of gross revenue. That is, they do not constitute an income from the sale of the company's product or service. How would you classify dividends in the income sheet?

18. Is it possible to have an income which is neither a credit to gross revenue nor to net revenue? Illustrate.

19. "The income sheet accounts are organized for the purpose of splitting up the gross revenue figure into several parts which represent the elements involved in the production of the products or services and the returns to the investors." Explain and illustrate what is meant by this statement.

20. Draw up a list of income accounts for some business with which you are familiar.

21. The following balance sheet represents the financial condition of the Albert Mercantile Company on January 1, 1925:

Assets		*Liabilities*	
Buildings	$30,000	Capital Stock	$50,000
Store Fixtures	9,800	Accounts Payable	5,000
Merchandise	36,500	Notes Payable	5,500
Accounts Receivable	5,000	Surplus	25,000
Cash	4,200		
	$85,500		$85,500

(a) Open the accounts represented on the statement.

(b) Enter the following transactions in these accounts. Open any additional accounts which may be necessary.

Sales were: for cash, $1,500, on account, $1,650, for promis-

sory notes, $1,380; merchandise was purchased: for cash, $850, on account, $5,200; received from customers on account, $2,000; paid to creditors on accounts, $2,500, on notes, $1,500; wages were paid, $950; general expenses were incurred and paid for in cash, $300; depreciation of buildings amounted to $100 and of fixtures to $150; an inventory of merchandise showed that $40,350 remained on hand after the above mentioned sales had been made.

(c) Prepare a balance sheet for this company after the transactions have been properly recorded.

22. State the entries which should be made to record the following occurrences; also state the effect upon the Expense, Net Revenue or Surplus accounts.

The stockholders are paid $50,000 in cash for dividends. The company receives $5,000 cash for dividends on stock owned. Interest on bonds, $6,500 is paid in cash. A net loss of merchandise from a fire amounts to $3,500. The bank credits the company with $350 for interest on the average daily balances. The income taxes are paid in cash, $5,000. A factory site is presented to the firm to insure retaining the plant in the city. The site is worth $10,000. A customer who owes the firm $2,000 fails and the account is known to be worthless. A new model of an improved type is perfected which renders worthless a stock of merchandise valued at $10,000. A substitute article manufactured by a competitor cuts down the market to such an extent that one plant is dismantled at a loss of $25,000.

23. To what accounts should the debit and credit entries be made for each of the following transactions?

Fuel is purchased for cash, $650. Wages to factory workers are paid, $2,500. Salaries of the office force are paid, $2,000. A customer pays his account, $85. Sales for cash amount to $3,000. Sales to customers on account amount to $5,000. Collections from customers on account amount to $2,500. The depreciation on the plant for the period amounts to $1,000. Fuel is consumed to the extent of $500. A payment of $75 is made for repairs to machinery. A payment of $150 is made for fire insurance to cover a three-year period. The electric light bill is paid, $25. A contribution of $100 is made to the Community Chest for charity. A bill for advertising is paid, $300. Interest on notes payable is paid, $75.

24. On June 1, a bill of goods is shipped to John Smith on account. The sale price is $1,000 subject to a discount of 2% if settlement is made in ten days. On June 10, Mr. Smith remits $500 in cash on account and a 6% sixty-day note for $480. At the end of sixty days the note is paid in full with interest. What entries should be made on the books of the firm selling the goods and also on John Smith's books for each of the transactions?

25. During the month of February the X company purchases goods from the Y company amounting to $2,000. According to the terms, a discount of 2% is allowed for payment in ten days. On receipt of the goods it was found that a portion of the shipment was not up to specifications and a claim for $200 was claimed by X. This claim was allowed by Y. At the end of ten days X remits, deducting 2% from the balance due. Give the entries on the books of both the X company and the Y company.

V. JOURNALIZING AND POSTING

1. What is meant by a business transaction? Is it possible to record all business transactions by journal entries? How should one analyze and record business transactions? What books might be used in the process?

2. It is customary first to record all transactions in a journal and then transfer or post the data to ledger accounts. Why should the information not be placed in the ledger accounts in the first place? Is there any material advantage in the use of journals?

3. Name some of the books of original entry. What information does the accountant desire to show in the general journal? What kind of paper rulings are best for general journal purposes?

4. There is columnar journal paper which has debit columns for accounts receivable, accounts payable, purchases, cash, and sundries; then a wide column for the names of the accounts and the explanations of the transactions; then credit columns for sundries, cash, sales, accounts payable, and accounts receivable.

(a) Write an explanation indicating how one records entries in this kind of journal, and how they are posted.

(b) Explain the advantages in the use of the columnar journal.

5. Explain the process of posting and paging. When should this be done? Is this process of any assistance in locating errors?

6. Explain the necessity for posting both creditors' accounts and the controlling account; customers' accounts and the controlling account.

7. What are opening entries, current entries, correcting entries, adjusting entries, closing entries?

How might the opening entries of a partnership differ from the opening entries of a corporation?

How should the bookkeeper make correcting entries? By erasing the old entry?

8. The customers of the Naborhood Grocery Company are constantly inquiring as to how much they owe. They are impatient if they are not informed of the amount within a short time. What might the bookkeeper do to facilitate matters?

9. The use of the purchases, sales, and cash books shorten the bookkeeper's work in what ways? If there be any doubt in the bookkeeper's mind whether the balances of purchases or sales should be posted to the debits or credits of their respective controlling accounts, what mental process should he use in order to reach a decision?

10. What is the voucher system? What advantage has this system over the ordinary purchase journal?

In the case of sales, what is the nature of the statement upon which the journal entry is based? What should be done with this after the entry is made? How can the statement be traced if it is wanted for references?

11. How does a bookkeeper determine the accounts to place in a ledger? What might be the ledger accounts for the following concerns: Nathan & Wells, Accountants, Clifton Garage, First Methodist Church, B. A. Walls, rancher, and Static Radio Manufacturing Corporation.

12. "Most of the columns on the so-called 'debit' side of the cash book are *credit* columns; and on the credit side we find debit columns." Explain.

A considerable amount of confusion results from the practice of entering all cash transactions in one journal called the cash books. Why not have a journal called Cash Receipts Journal, and another called Cash Disbursement Journal?

Is there any necessity for keeping a Cash account when the Cash Book is closed periodically?

13. "If all sales are entered in a sales book and all receipts in a cash book certain data will be shown in these journals in duplicate."

Also, if all purchases are entered in a purchase book and all disbursements in a cash book, the data respecting purchases will be shown in these journals in duplicate.

If the quotation and supplementary statement be true, how are the situations to be met?

14. Sometimes there is a Purchase Discount column on the receipts side of the cash book and a Sales Discount column on the cash disbursements side of the cash book. Sometimes the arrangement is reversed: Sales Discount on the receipts side, and Purchases Discount on the disbursement side.

Can you see any advantage of the one arrangement over the other?

How should cash receipts and cash payments involving discounts be recorded if there are no discount columns in the cash book?

15. "The purchase book, so called, is commonly used as a journalizing medium for transactions covering the purchase of the principal raw materials and merchandise stocks only. The vouchers payable register on the other hand, is a journal which embraces a record of all acquisitions, on a credit basis, of structures, commodities, and services."

Rule a vouchers payable register for a small manufacturing concern and explain its use.

16. The Service Grocery Company is a small retail organization.

Draw up a system of financial records for a business of that nature, explaining each record.

17. "The thing of primary importance for him (the student) to understand is the relation of the records of original entry to the accounts—that the nature of the information desired in the accounts determines the nature of the information recorded in these records, and the nature of the information recorded in them determines their construction." Explain.

18. A concern may use any number of ledgers to suit its convenience, such as, Customers, Creditors, General Ledger, Plant and Equipment Ledger, Supplies Ledger, Notes Ledger, etc.

Explain what data should be recorded in these various books.

19. Patrick Harrison decides to enter the men's furnishings business. He plans to close his books monthly. The following are his transactions for January. The numbers are the dates.

1. Harrison buys the business of Russell Hastings. The merchandise inventory is valued at $6,000, furniture and fixtures at $500. These he pays for, half with cash and half with a note. He places $1,000 in the business.
2. Pays rent for the month, $75. Pays for heat and light, $20.
3. Cash sales for the day, $50.
4. Buys merchandise for $200.
5. Sells on account to J. L. Ames, $20. Cash sales, $75.
6. Pays sales clerk $25.
8. Insures his stock for remainder of month, $10.
9. Cash sales, $200.
10. Buys furniture and fixtures, $50. J. L. Ames pays his account.
11. Sales on account to B. A. Sills, $10. Sales on account to Benjamin Levine, $20. Sales on account to A. M. Anderson, $15.
12. Cash sales, $150. Buys merchandise, $250, on account.
14. Levine pays half of his bill.
15. Pays sales clerk $25.

(a) Make journal entries and explain each.
(b) Preserve for future use.

20. If the accountant makes use of sales, purchases and cash journals, in general, the only entries that remain for the general journal are: opening entries, current entries, adjusting entries and closing entries.

The following data for a particular period should be journalized:

1. A note for $200 is received from B. A. Nelson.
2. The proprietor invests in the business: cash $300, building, $2,000, merchandise inventory $1,500, land $1,000. He gives in return a note for $750, and an open account for $1,000.

3. The proprietor gives a note for $100 to Harry Lee for a purchase.
4. Delivery equipment for $300 is purchased on open account from the Michigan Furniture Company.
5. Buying expense of $25 is closed into Expense and Revenue.
6. Office furniture is sold to Willis Jones for $75.
7. Purchases of $2,500 are closed into sales.
(a) Journalize and explain these entries.
(b) Indicate which are opening, current, adjusting, and closing entries.

21. F. A. Watkins made the following purchases during the month of May:

1. Bought from Nicholson Brothers, 300 Calhoun Street, terms 60 days, merchandise per invoice No. 20, $400.
6. Bought from P. Highland, 218 University Ave., terms 30 days, merchandise per invoice No. 21, $300.
14. Bought from T. A. Hastings, 32 Colby Ave., terms 1/10/n/20, merchandise per invoice No. 22, $600.
18. Bought from Ohio Dry Goods Company, 200 Reading Road, terms 2/10/n/30, merchandise per invoice No. 23, dated May 16, $450.
21. Bought from P. C. Glasgow, 20 Ludwig Ave., terms 1/10/n/30, merchandise per invoice No. 24, $175.
24. Bought from B. A. Cobb, 258 Rose Street, terms 30 days, merchandise per invoice No. 25, dated May 22, $500.
28. Bought from R. B. Brown, 400 Plum Street, terms on account, merchandise per invoice No. 26, $1,000.
30. Bought from O. C. Andrews, 200 Walnut St., terms 1/10/n/20, merchandise per invoice No. 27, $200.
(a) Draw up a standard form of purchase journal.
(b) Make the above journal entries.
(c) Set up the required accounts and post the journal entries.

22. Calvin Sowers made the following sales during the month of August:

1. Sold to R. L. Gorman, Newport, Cincinnati, merchandise on account, per order 10, $50.
6. Sold to B. B. Smith, Norwood, 30 days, merchandise per order 11, $25.

11. Sold to M. A. Noble, Evanston, terms 60 days, merchandise per order 12, $75.

13. Sold to Palace Hotel, Walnut Hills, terms 2/10/n/30, merchandise per order 13, $25.

16. Sold to T. Y. Jenkins, Hyde Park, terms 30 days, merchandise per order 14, $40.

21. Sold to E. A. Wildman, Price Hill, terms 60 days, merchandise per order 15, $30.

24. Sold to B. E. Lawton, St. Bernard, terms 10 days, merchandise per order 16, $20.

27. Sold to R. S. Hopp, Clifton, terms 30 days, merchandise per order 17, $15.

30. Sold to Robert Hopkins, Covington, terms 2/10/n/30, merchandise per order 18, $35.

(a) Draw up a standard form of sales journal.
(b) Make the above journal entries.
(c) Set up the required accounts and post the journal entries.

23. The following transactions are made by the business of A. Blair during the month of January, 1925:

1. A. Blair invested $3,500.
   Paid for office rent, $100.
3. Received on account from the Wills Company, $500.
5. Paid Maxwell Company on account, $150.
7. Cash sales, $175.
   Purchased merchandise for cash, $50.
9. Received on account from B. A. Block, $80.
11. Paid for delivery, $15.
13. Purchased merchandise for cash, $40.
15. Advertising expense paid, $10.
    Clerk's salary paid, $30.
17. Cash sales, $130.
19. Received from D. A. Farrell, on account, $100.
21. Paid Maxwell Company, on account, $25.
23. Paid freight and drayage, $15.
    Received from W. R. Yawman, $50.
26. Paid delivery boy, $1.
    Paid for stamps, $2.
    Advertising expense, $5, paid.
28. Received from T. E. Francis on account, $30.

31. Paid administrative expense, $45.
    Paid heat and light, $10.
    Paid clerk's salary, $30.

(a) Rule a cash book and make the above entries.
(b) Set up the necessary accounts and post.
(c) Foot and rule the cash book.

In the same cash book, record the following transactions during February for A. Blair.

1. A. Blair made a further investment of $1,000 in his business.
3. Bought merchandise for cash, $600.
   Paid office rent, $100.
4. Cash sales, $75.
7. Paid clerk's salary, $15.
8. Received $10 from Roy Graybrook in full of account.
10. Paid A. B. Hess $20 in full of account.
11. Cash sales, $200.
13. Paid Elliott and Company $15 on account.
15. Paid clerk's salary, $15.
    Paid office clerk, $15.
16. Paid $5 for stamps and stationery.
18. Received on account from W. A. Wilkins, $45.
    Cash sales, $250.
20. Purchased merchandise for cash, $500.
    Paid delivery expense, $3.
22. A. Blair withdrew for personal use, $50.
    Received from M. A. Poole, $25 on account.
26. Cash sales, $75.
28. Paid Brohm Company $45 on account.
    Received on account from R. B. Davis, $65.
    Paid clerk's salary, $15.
    Paid office clerk, $10.
    Paid delivery expense, $3.
    Paid for heat and light, $5.

(a) Make the above entries.
(b) Post the entries using the January accounts.
(c) Foot and rule the cash book.
(d) Record the balance in the cash account.

24. All of the purchases and sales of the Community Manufacturing Company are made on account.

The purchases are made from three companies: A, B, and C. The Community Manufacturing Company buys three classes of goods from each of the companies. It calls these goods: tools, hardware, miscellaneous.

All of the sales are made to four companies: D, E, F and G. The Community Manufacturing Company classifies its sales: hardware, implements and engines.

(a) Draw up purchases and sales journals for the Community Manufacturing Company.

(b) Assume at least ten transactions and show how the data should be placed in the journals.

25. The following are the transactions for A. D. Wills for December:

1. A. D. Wills put $7,000 into a retail coal business.
He paid $100 for rent.
3. Bought coal on account from the Central Indiana Coal Company for $600.
Bought furniture and fixtures for cash, $500.
4. Sold coal on account to D. A. Mill, $75.
Bought on account from White Coal Company, $250.
6. Bought on account from Robin Coal Company, $500.
Paid for telephone service, $10.
7. Made a cash purchase of coal, $1,000.
Paid Central Indiana Coal Company, $150.
9. Cash sales, $300.
Sold merchandise on account to O. C. Brown, $100.
Sold merchandise on account to Palace Restaurant, $200.
11. Paid remainder owed Central Indiana Coal Company.
Sold D. A. Mill, $50 on account.
13. Received from O. C. Brown, $75 on account.
Cash sales, $375.
15. Paid clerk's salary, $50.
18. Paid Robin Coal Company, $200 on account.
Cash purchases, $500.
21. Received a note of $100 from D. A. Mill to apply on account.
23. O. C. Brown paid the remainder of his bill.
Sold Palace Restaurant, $125 on account.
26. Cash sales, $350.
Bought from Robin Coal Company, $350 on account.

28. Gave a note to Robin Coal Company for $200 to apply on account.
Sales to R. B. Ames, $75 on account.
30. Received $300 from Palace Restaurant to apply on account.
Sales on account to D. A. Mill, $100.
31. Clerk hire, $50, paid.
Cash sales, $300.
(a) Make all entries in the general journal.
(b) Explain all entries.
(c) Preserve for future use.

26. Journalize the following:

(1) X and Y form a partnership and each deposits $10,000.

(2) Merchandise of $8,000 is purchased. Half of the amount is paid in cash and a note is given for the remainder.

(3) X withdraws $500. Y gives $100 to the Red Cross.

(4) Office supplies for $50 are purchased from A.

(5) The partnership gives a mortgage for $500.

(6) An order is received for $400 and is filled. X and Y bear the cost of shipping, which is $25.

(7) Half of the amount due on office supplies is paid.

(8) A telephone bill for $10 is received. The telephone company takes merchandise of an ordinary selling value of $12 in settlement.

(9) The partners buy land and building for $10,000, giving cash for half and a note for the remainder. The estimated value of the building is $3,000.

(10) X and Y buy stock and goodwill for $3,000 from a nearby competitor, paying $2,000 cash and assuming a note for the remainder. The goodwill is estimated at $500.

27. Sometimes the books of very small establishments are kept by single entry instead of by double entry.

By examination of the books an accountant finds that the accounts show: cash, $200; accounts receivable, $1,000; notes receivable, $200; furniture and fixtures, $100; merchandise inventory, $2,000; there is a note payable for $2,000.

Make a journal entry placing the books upon a double entry basis.

28. Journalize and explain the following transactions. Consider each entry separately.

(1) R. A. Mills buys a physician's practice. He pays $5,000 for the furniture and fixtures and $10,000 for the library. Payment is made $10,000 in cash, and $15,000 by giving a note.

(2) An automobile is purchased on January 1, for $1,000, payment being made half in cash and the remainder with a note. The following expenditures are made on the car before it is put in use: Starter $25, insurance for one year $45, bumpers $20, extra tire $22, spot light $7. Payment for the accessories, including insurance, was made in cash.

(3) The American Automobile Manufacturing Company invests $10,000 in Fisher Bodies Company. This investment consists of $5,000 of preferred stock and $5,000 of common stock. Payment is made in cash.

(4) Ford County buys $100,000 worth of machinery for road building. One fourth of this is for cash, one fourth on account, one fourth for a note, and the county gives a chattel mortgage for the remainder.

(5) The cost of securing a patent by the Acme Machine Tool Company is $5,000. Payment is made in cash. This patent places the tool company in an advantageous position. You, as bookkeeper, are told to place the patent on the books at $15,000.

(6) The accounts receivable of a firm are $45,000, notes receivable $10,000, sales $60,000. Set aside an allowance for bad debts of 2%.

(7) A typewriter is purchased for $100. It is believed that the machine will have a scrap value of $20 at the end of eight years. At the end of eight years, however, you are able to sell the machine at $30. Record at the end of the period.

(8) Simmons owes Watkins $1,000 on account. The obligation, when due, is met half in cash and the remainder with a 6% note.

(9) The Pink Taxi Company purchases five automobiles at a cost of $1,500 each. They meet their obligation within ten days and are allowed a discount of 5%.

(10) During the month of December the upkeep of an automobile was: Garage rent $10, gas $7.50, oil $2.50, incidental repairs $5. Payment was made in cash.

(11) A sells $5,000 worth of goods to B on account. The goods were damaged in transit. B returns $1,000 of it, and

states that he will keep the remainder of it if allowed a 2% reduction from the purchase price. A agrees.

(12) A corporation has $10,000 from a month's earnings. It pays half of this in dividends and leaves the remainder in the business.

29. The following transactions for the business of Geo. Glasgow occurred during the month of June. Record in a special column journal:

1. Geo. Glasgow invests $10,000 in the business.
   Purchases on account from D. R. Ennis, $9,000.
   Cash sales of $560.
2. A bill of $6,000 is paid to D. R. Ennis. A discount of 2% is allowed.
3. Sales on account are as follows: T. E. Bond, $300; J. R. Fox, $150; B. A. Irwin, $185.
   Cash sales are $680.
   Advertising is paid for, $150, cash.
4. Purchases are made from the Fourier Company for $2,000, terms 2/10/n/30.
5. A May bill of the Fourier Company is paid for cash, $500. Geo. Glasgow takes advantage of a 2% discount.
   Cash sales, $425.
6. Cash sales, $125.
   Salaries of $335 are paid.
   Sales on account: D. A. Norton, $25; T. E. Todd, $75.
7. Furniture and fixtures are purchased for $140.
   Cash sales, $275.
8. Sales on account to T. E. Bond, $150; J. R. Fox, $125; B. A. Irwin, $115.
9. Insurance to the amount of $250 is paid for.
10. An addition to the building is made at a cost of $750, paid in cash.
    Sales on account: D. A. Norton, $55; T. E. Todd, $125.
    Cash sales, $480.
11. The bill of D. R. Ennis of June 1, is paid. A 2% discount is allowed.
    Cash sales, $175.
12. Delivery equipment is purchased for $1,200.
13. Cash sales, $625.
    Purchased from D. R. Ennis, $570, terms 2/10/n/60.
    Salaries of $150 are paid for clerks' hire.

14. Bill of the Fourier Company of June 4 is paid, less 2% discount.
Sales on account: T. A. Todd, $120; J. R. Fox, $72.
15. Money in the amount of $500 is borrowed from the First National Bank for a 30-day, 6% note.
Expenses on delivery equipment, $25.
16. Attorney's fees of $150 are paid.
Cash sales, $315.
Purchases from the Universal Company, $2,500, terms 2/10/n/30.
17. Sales on account: T. E. Bond, $125; B. A. Irwin, $110.
18. T. E. Bond pays $150.
D. A. Norton pays $50.
19. Purchased from Universal Company, $900, terms 2/10/n/30.
Cash sales, $370.
J. R. Fox pays $100 on account.
20. Salaries amounting to $275 are paid.
Cash sales, $215.
21. Cash sales, $75.
Office supplies purchased for $45.
22. Cash sales, $225.
A bill is paid by T. E. Bond, $125.
23. T. E. Todd pays $50 on account.
24. Sales on account: T. E. Bond, $100; J. R. Fox, $25; B. A. Irwin, $100.
25. Paid for freight, $25.
Cash sales, $75.
26. Paid for advertising, $10.
Cash sales, $312.
27. Geo. Glasgow withdrew $500 from the business.
28. Cash sales, $125.
Delivery supplies, $76.
29. Received from T. E. Bond, on account, $50; from B. A. Irwin, $50.
30. Salaries of $300 are paid.
Other payments: Telephone and telegraph, $12; gas bill, $5; coal, $50.

Total the various columns of the journal used in the above problem. Set up the necessary ledger accounts and post the journal entries to the accounts. Make use, of course, of the journal entries to the accounts.

various customers' and creditors' ledgers as well as the controlling accounts, accounts receivable and accounts payable.

Preserve for future use.

30. Journalize and explain the following transactions:

(1) J. B. Bishop takes over the business of A. P. Madden. Among the assets are: Accounts Receivable, $15,000; Notes Receivable, $1,000; Merchandise Inventory, $8,000; Building, $10,000; Furniture and Fixtures, $2,000; Delivery Equipment, $1,000. Bishop agrees to assume a note for $2,000 due in one year. He pays cash of $15,000 and gives a five-year note for $10,000.

(2) Bishop had set up an allowance for bad debt. He finds that he cannot collect, and probably never will be able to collect, upon an account of $200 owed him by A. R. Cavill.

(3) A $3,000 automobile, upon which a $1,000 allowance has been set up is sold for $1,000.

(4) A 6% note for $500 is paid by Bishop at the end of the year.

(5) Bishop buys a $500 Commonwealth bond on June 30. He pays, in addition to the $500, interest of $15. He receives $30 interest on December 31. Record on June 30 and December 31.

31. Journalize the following data considering each group separately. Explain all entries.

1. Wilson invests, land of $5,000, building of $2,000, and cash of $500, in his business.
3. Wilson paid $1,000 for insurance for a year. Insurance to the amount of $2,000 has been used up.
4. Wilson had bought furniture and fixtures on account for $400. He now pays for the furniture and fixtures, but is allowed a discount of 4%.
5. Wilson buys the business of a competitor. He estimates the goodwill at $500. He pays cash of $3,000 and gives a note of $1,000 in payment.
7. Wilson issues a note for $100, due in 30 days at 6%, in favor of R. A. Cole, to be applied on account.
8. Wilson pays in advance for a year's advertising in the Saturday Evening Post, $3,000.

10. Furniture and fixtures of $500 and delivery equipment of $400 are purchased, half of the total for cash and the remainder on account.
12. Wilson decides to allow for depreciation on his building to the amount of $500.
15. The directors of a corporation declare dividends to the amount of $5,000. They decide to leave another $5,000 in the business.
17. Wilson finds he is not able to pay an account of $500, so he gives a 6% note for the amount.
18. Wilson owes the X Company $3,000 on account. He pays the bill within ten days and is allowed a discount of 2%.
20. The Acme Coal Company owes Wilson $5,000 on account. They pay promptly and consequently take advantage of a 4% discount.
24. Two partners divide $10,000 equally. Later each withdraws $2,000 from the business.
26. A machine is purchased on account for $3,000. Freight to the amount of $50 is paid in cash. The cost of installations is $150. Labor on the installation of the machine is $40 but this will not be paid until a month hence.
28. A corporation has goodwill of $25,000 on its books, and it decides this is too high a figure. They decide to write off half of it.
30. Wilson reduces his investment in the business in the amount of $1,000.

32. Make the following correcting entries and explain each one in detail.

(1) Cash of $100 was received from a customer to apply on account, but was recorded as a cash sale.

(2) The purchase of furniture and fixtures of $500 was debited to purchases instead of to the asset.

(3) Cost of installation of a machine to the amount of $50 was improperly debited to expense.

(4) A charge of $75 for selling expense should have gone to administrative expense.

(5) The Net Revenue account contains $10,000. Dividends of $5,000 were declared out of Surplus which was contrary to state law.

33. On January 1, 1925, the books of the Acme Manufacturing Company showed the following balances: Land, $16,000; Buildings, $12,000; Warehouse, $4,000; Stationery and Supplies, $150; Furniture and Fixtures, $800; Delivery Equipment, $4,000; Shop Expense, $1,000; Capital Stock, $30,000; Accounts Receivable, $6,000; Accounts Payable, $4,000; General Expense, $800; Cash, $4,000; Notes Payable, $2,000; Notes Receivable, $400; Fuel, $300; Purchases, $20,000; Sales, $40,000. The balance of the Surplus account represented the difference between the above total debits and above total credits.

Set up the accounts called for in the above paragraph. Place the balances therein, upon the proper sides.

In addition, the Accounts Receivable were made up of the following: A. B. Jones, $400; C. D. Smith, $600; E. F. Wilson, $800; G. H. Brown, $750; I. J. Cohen, $580; K. L. White, $650; M. N. Williams, $1,000; O. P. Probst, $800; R. S. Simpson, $420.

The Accounts Payable were made up of the following: A. B. Wells, $500; C. D. Sims, $900; E. F. Faulkner, $800; G. H. Hopkins, $1,000; I. J. Jasper, $800.

Set up the various Accounts Receivable and the various Accounts Payable in separate groups and apart from the accounts in the first paragraph.

Make the following general journal entries for the first part of January:

1. Part of the warehouse was destroyed. It is estimated that the loss amounted to $1,000.
2. Stationery and supplies were used up to the amount of $50.
3. An addition was made to the building. The cost was $2,000.
4. It is believed that the land has increased in value. Accordingly, that amount is written up by $4,000.
5. The shop expense increased $200.
   E. F. Wilson paid half of his account.
6. M. N. Williams was unable to pay his account so he gave a note for the amount.
7. The company paid A. B. Wells one-fifth of that which it owed him.
   R. S. Simpson paid $220 of his account.
   A. B. Jones settled his account in full.
8. The company received payment of a $100 note.
   An auto truck was sold for $400.

9. Purchases were made on account, from C. D. Sims, in amount, $400.
10. A. B. Jones bought goods on account for $200. C. D. Smith paid one-third of his account.
11. The company paid E. F. Faulkner in full. New furniture and fixtures were put in at a cost of $200.
12. O. P. Probst paid one-half of his bill. G. H. Brown paid $150 on his account. The company paid I. J. Jasper $200, and C. D. Sims $400.
13. The company gave G. H. Hopkins a note for half the amount owed. Fuel amounting to $100 was used up.
14. I. J. Cohen paid $280 of his account. K. L. White paid $250 of his account. The company made purchases of $500.
15. Insurance of $200 on building was paid. Wages of $300 for shop employees was paid.

(a) After the above entries are made in the general journal, post the information.

(b) Close the accounts that balance.

(c) Preserve for future use.

VI. THE TRIAL BALANCE

1. In accounting, the process starting with the business transaction consists in recording the transaction, posting to the account, taking a trial balance, and making the reports.

Formerly, a great deal of emphasis was placed upon the trial balance, often to the neglect of the balance sheet and the income statement.

(a) Can you give a reason for special emphasis upon the trial balance?

(b) Is the trial balance of greater importance than the reports?

2. There are two ways of preparing trial balances: In one, the amount of each side of the accounts is carried to the trial balance; in the other, the **balance** only of each account is placed in the trial balance.

What advantages or limitations do you see in each method?

3. A bookkeeper takes a trial balance at the end of an accounting period. He finds that the debit amount equals the credit amount. Later, he discovers that he failed to record, in his accounts, the fact that he had received an amount of $200 from a cash sale.

A trial balance is made at the end of an accounting period, and it checks. Later, in going over the books, it is discovered that a credit entry should have been made to Accounts Payable instead of Cash.

Has the trial balance proved anything in either case?

4. Sometimes, in glancing through trial balances it will be seen that the accounts have been listed in a haphazard manner.

Can you suggest a satisfactory arrangement?

What advantage is gained by systematic arrangement?

5. "The manner of showing the accounts in a trial balance is governed by the way in which the trial balance is to be used and the purpose it is to serve." Interpret and explain this quotation.

6. A bookkeeper makes a trial balance for the Federal Wholesale Company. Subsequently, customers complain that the statements sent them are incorrect. In view of the fact that the trial balance has been made and found to balance, how could the customers be correct in their contentions?

7. There are various ways of checking errors in a trial balance:

(1) In case of a difference of one in the amounts, what should be one's conclusion?

(2) If the difference between the debit and credit, divided by two, just equals one of the accounts in the trial balance, what may the error have been?

(3) If the bookkeeper adds the current totals of the open accounts to the totals of the previous trial balance and deducts the totals of the accounts closed during the current period, of what aid is the result?

(4) If the difference between the trial balance totals is divisible by 9, what is the probable cause of the error?

8. In a trial balance, the bookkeeper may list each debtor's open account and each creditor's open account, or he may use merely the summary accounts such as Accounts Receivable and Accounts Payable. Which do you think is the better method? Why?

9. "The primary purpose of the trial balance is to prove the equality of the debits and credits recorded in the accounts. Although this is its primary function, it may serve other purposes."

To what other purposes is reference made?

10. "The trial balance has very distinct limitations. In the first place it will not disclose the complete omission of a transaction. Further, it does not prove that transactions have been properly analyzed. Still further, it will not disclose a numerical mistake which has an equal effect on both ledger columns."

Explain and give examples indicating how each condition might arise.

11. The following are the trial balances for A. B. Calvin for December 31, 1924:

Cash	$ 580	$ 310	$ 270	....
Accounts Receivable	3,000	250	2,750	....
Notes Receivable	500	200	300	....
Furniture and Fixtures	600	....	600	....
Delivery Equipment	200	....	200	....
Merchandise Inventory	3,500	....	3,500	....
Building	1,000	....	1,000	....
Land	2,000	....	2,000	....
Accounts Payable	2,500	4,000	....	$ 1,500
Notes Payable	....	200	....	200
Calvin, Proprietor	....	5,970	....	5,970
Sales	....	15,000	....	15,000
Purchases	7,000	....	7,000	....
Buying Expense	350	....	350	....
Selling Expense	1,200	....	1,200	....
Delivery Expense	1,500	....	1,500	....
Advertising Expense	2,000	....	2,000	....
	$25,930	$25,930	$22,670	$22,670

How do you account for the fact that the totals differ in each case? Have the accounts been kept incorrectly?

12. The following balances of accounts are taken from the books of the partners Sherwood and Cairns of January 31, 1925:

Cash, $19,000; notes receivable, $50,500; accounts receivable, $66,000; merchandise inventory, $74,000; office furniture, $2,000; delivery equipment, $5,600; buildings, $25,000; land, $5,000; accounts payable, $52,000; notes payable, $50,000; Sherwood, capital, $68,950; Cairns, capital, $68,950; sales, $150,000; sales returns and allowances, $1,500; purchases, $100,000; purchases discounts, $1,700; purchase returns and allowances, $500; labor, $20,000; heat, light and power, $1,000; repairs, $1,200; office salaries, $2,000; selling expense, $10,000; advertising expense, $5,000; insurance, $3,000, and taxes, $1,300.

Place the balances of the above accounts in the proper columns and total.

13. The following balances are taken from the books of J. B. Smith:

Cash, $500; delivery expense, $500; sales discount, $300; purchases, $10,000; building, $4,500; notes receivable, $300; mer-

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chandise inventory, $5,000; insurance, $250; interest paid, $90; land, $1,500; sales, $15,000; accounts receivable, $2,700; buying expense, $300; advertising expenses, $2,000; furniture and fixtures, $600; accounts payable, $2,000; selling expenses, $1,500; office supplies, $75; purchase discounts, $200; interest earned, $20, and notes payable, $1,500.

List the accounts in the proper order and prepare a trial balance.

14. The student, as bookkeeper, with the Alfred Koepple concern, is given the following list of accounts and is asked to make a trial balance:

Cash, $3,000; land, $15,000; purchases, $24,000; notes payable, $3,100; wages and salaries, $3,500; miscellaneous expenses, $2,400; fixtures, $3,500; fuel, $400; notes receivable, $1,200; interest, $800; Alfred Koepple, capital, $24,200; rent expense, $600; buildings, $22,500; mortgage payable, $10,000; accounts receivable, $5,000; sales, $40,000; accounts payable, $5,500, and delivery equipment, $900.

In the meantime the books of the concern have been destroyed, all except the above material which was in the custody of the bookkeeper.

Arrange the accounts and make a trial balance from the data given.

15. Prepare a trial balance from the Ledger of Patrick Harrison, in Problem 19, Chapter V.

16. Prepare a trial balance from the Ledger of A. D. Wills, in Problem 25, Chapter V.

17. Prepare a trial balance from the Ledger of Geo. Glasgow, in Problem 29, Chapter V.

18. Prepare a trial balance from the Ledger of the Acme Manufacturing Company, in Problem 33, Chapter V.

19. The following are the trial balances of the Universal Manufacturing Company for the years 1924 and 1925:

The Universal Manufacturing Company

Trial Balances

	December 31, 1924.		*December 31, 1925.*	
Cash	$ 60,000	......	$ 40,000	......
Notes Receivable	108,000	......	200,000	......
Accounts Receivable	480,000	......	500,000	......
Raw Materials, Jan. 1, 1924.	10,500	......	20,000	......
Goods in Process, Jan. 1, 1924	12,500	......	23,000	......
Finished Goods, Jan. 1, 1924.	20,000	......	40,000	......
Furniture and Fixtures	8,800	......	8,800	......
Allowance for Depreciation on Furniture and Fixtures	......	$ 2,000	......	$ 2,000
Machinery and Equipment	300,000	......	300,000	......
Allowance for Depreciation on Machinery and Equipment	......	30,000	......	30,000
Delivery Equipment	36,000	......	36,000	......
Allowance for Depreciation on Delivery Equipment	......	3,200	......	3,200
Factory Building	220,000	......	220,000	......
Allowance for Depreciation on Factory Building	......	14,000	......	14,000
Factory Land	250,000	......	250,000	......
Goodwill	320,000	......	350,000	......
Notes Payable	......	20,000	....	120,000
Bonds Payable	......	200,000	......	400,000
Accounts Payable	......	75,000	......	60,000
Capital Stock	......	600,000	......	600,000
Surplus	......	450,100	......	857,600
Sales	......	1,200,000	......	900,000
Purchases, Raw Material	225,000	......	300,000	......
Labor	280,000	......	320,000	......
Factory Expense	64,500	......	70,000	......
Delivery Expense	10,000	......	7,000	......
Selling Expense	38,000	......	100,000	......
Office Expense	24,000	......	25,000	......
Advertising	25,000	......	75,000	......
Insurance	14,000	......	14,000	......
Taxes	60,500	......	60,500	......
Interest on Bonds	30,000	......	30,000	......
Interest on Notes Receivable	......	3,000	......	3,500
Interest on Notes Payable	500	......	1,000	......
	$2,597,300	$2,597,300	$2,990,300	$2,990,300

A disgruntled stockholder obtains the above trial balances. He asks an accountant to explain why dividends have not been paid.

Interpret these trial balances and point out, in a letter to the stockholder, what the company has done or failed to do. Should the company have declared dividends?

20. The following trial balances were taken from the books of the Ohio Manufacturing Company on the dates indicated:

THE OHIO MANUFACTURING COMPANY
Trial Balances

	December 31, 1923.		*December 31, 1924.*	
Cash	$ 10,000	$ 6,000	$ 12,000	$ 10,000
Notes Receivable	2,000	500	1,500	......
Accounts Receivable	20,000	5,000	30,000	4,000
Raw Materials	9,000	......	12,000	......
Goods in Process	6,000	......	7,000	......
Finished Goods	14,000	......	20,000	......
Furniture and Fixtures	9,000	1,000	8,000	......
Allowance for Depreciation on Furniture and Fixtures	......	1,800	......	1,800
Machinery and Tools	50,000	......	50,000	5,000
Allowance for Depreciation on Machinery and Tools	......	15,000	......	15,000
Buildings	40,000	......	60,000	......
Allowance for Depreciation on Buildings	......	7,000	......	8,000
Land	50,000	......	50,000	......
Goodwill	60,000	......	70,000	......
Accounts Payable	4,000	10,000	5,000	25,000
Bonds Payable	......	50,000	......	70,000
Surplus	......	59,700	......	104,700
Capital Stock	......	125,000	......	150,000
Sales	......	100,000	......	75,000
Purchases	45,000	......	55,000	......
Factory Expenses	10,000	......	15,000	......
Labor	25,000	......	30,000	......
Salesmen's Salaries	7,000	......	14,000	......
Advertising	4,000	......	10,000	......
Delivery Expense	2,000	......	1,000	......
Office Salaries	10,000	......	12,000	......
Office Supplies	1,000	......	2,500	500
Interest on Bonds	3,000	......	4,000	......
	$381,000	$381,000	$469,000	$469,000

(a) Examine the above trial balances and account for the various changes in the accounts.

(b) Write a report to the president of the company pointing out wherein the policies of the concern are subject to criticism.

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VII. DEFERRED AND ACCRUED ITEMS

1. The books of a corporation are closed twice a year: on June 30 and on December 31. Most of the journal entries are made very shortly after the completion of the business transaction. This is done so that the true condition of the business may be recorded from day to day. However, there are some changes which occur from time to time which are not recorded until the books are closed.

(a) What are some of these changes?

(b) Can you see any justification for not recording these changes until the books are closed?

2. It seems that a certain thought process should be gone through as one considers the matter of accrued and deferred items. Take an example of accrued income, accrued expense, a deferred charge to expense, and a deferred credit to income, and state in each instance what you think about in analyzing each case.

3. (1) The Sullivan Company receives a 60-day, 6% note for $120, on May 1. What are the entries May 1, May 31, and June 30?

(2) The Prescott Company issues a $2,000, 6% note on August 1, the note to run 90 days. The books are closed monthly. Record the situation in respect to this note up to the time the note is paid.

(3) The weekly salaries of the Soldan Company are $12,000. The month ends on Wednesday and the books are closed on that day. The wages are not paid until Saturday. Record the situation in respect to wages on Wednesday and on Saturday.

(4) On January 1, 1924, the Calvin Company receives an annual rental of $14,000. What entries should be made on January 1, and on January 31? What entry should be made if the books are not closed until the end of the year?

4. In closing the books at the end of an accounting period, the accountant should bear in mind that there are usually accrued and deferred items to be considered. Where does he get this information?

What general considerations determine whether an outlay should be carried to the expense and revenue statement or to the balance sheet?

5. "The cost of stripping overburden in the case of mining properties requires unusually heavy expenditures for one or two years and hence should not be entirely charged to expense in the periods in which the outlay actually occurs but should be distributed evenly over several succeeding periods; similarly, unusual losses caused by technical improvements, accidents, etc., should be distributed over several expense and revenue statements."

Explain why expenditures for stripping, for leases for long time periods, etc., should be distributed over the statements of several fiscal periods.

6. Losses of uninsured property occurred during the course of construction. How should an item of this kind be treated in the accounts and statements? How should such losses occurring during the periods of business operations be handled?

7. Which is the best procedure: to charge such items as loss by fire to the past, to the present, or to the future? How should the proposition be treated in each case?

Is it always improper to charge a burden to the future if the benefit arising therefrom has gone for the benefit of past earnings?

8. How should the following cases be dealt with in the accounts?

(1) A river washes away five acres of land.
(2) A cyclone destroys a partially constructed building.
(3) A flood washes away the fertile soil of a forty acre field.
(4) Hail destroys practically all of the glass coverings of a large greenhouse establishment.
(5) Lightning destroys a half-dozen high grade cattle.
(6) Dogs destroy a large portion of a flock of sheep.
(7) Heavy winds destroy an eighty acre tract of wheat.
(8) A cashier absconds with $10,000 of a firm's cash.

9. How is it possible to have more liabilities than assets on a balance sheet? Can a firm owe more than it has?

Is it possible or desirable to treat a loss as a deferred charge to operation?

10. During the course of building operations, it is discovered that the builder does not have absolutely clear title to the land upon which the building is being constructed.

After considerable litigation and expense, clear title is obtained. How should costs of this nature be treated in the accounts?

11. "While a large portion of American business is done on a credit basis, i.e., where services are sold and delivered significantly in advance of payment, there are numerous important cases where just the reverse is the customary procedure, i.e., where payment is made in advance of delivery."

Explain the meaning of the above quotation and give several examples.

12. A municipal accountant argues that it is of no importance to show accrued and deferred items on the books, i.e., the total amount of such assets will, in the long run, just about offset the total amount of such liabilities. Criticize.

If the accountant were correct in the above contention, then it is reasonable to ignore depreciation, because, in the long run, the total depreciation will just about offset the total appreciation. Criticize.

13. A corporation loans one of its stockholders $25,000. Both the corporation and the stockholder fail at the same time. Creditors of the corporation find that they can get only fifty cents on the dollar from the corporation. What are the claims of the creditors against the stockholder? How would this matter be handled in the corporate books?

A partnership makes a personal loan of $5,000 to one of its members. The partnership fails. What are the claims of the creditors? How would the matter be handled on the partnership books?

14. Make the following entries:

Accrued Expenses: Insurance $25, rent $200, Advertising $15, interest on notes payable $10, and dues $25.

Accrued Income: Interest on notes receivable $25, rent $150, and subscriptions $50.

Deferred Charges: Taxes $200, salary of sales clerk $50, office salaries $150, freight bills $35, and salary of salesmen $350.

Deferred Credits: Subscriptions $500, rent $100, and license $25.

15. Make the entries necessary to record the following information:

(1) Interest to the amount of $100 has been earned but not yet received.

(2) A publishing concern receives $1,200 for subscriptions.

(3) Insurance of $120 has been consumed.

(4) A business owes $2,400 for rent which it has not yet paid.

(5) An individual has received the benefit of a yearly magazine subscription of $2.50.

(6) Interest to the amount of $200 is due but has not yet been paid.

(7) There is a deferred charge to advertising of $500.

(8) Wages accrued are $150.

(9) A publishing concern has earned half of $2,400 subscriptions.

(10) Accrued income for rent of $600 has not been received.

(11) Salaries of $200 were paid to employees in advance.

(12) Salaries of $1,000 are owed but not yet paid.

16. The following information is taken from the books of the C. A. George Company on December 31, 1924:

Inventory, January 1, 1924	$12,000
Store Equipment	800
Allowance for Depreciation on Store Equipment	80
Delivery Equipment	1,000
Allowance for Depreciation on Delivery Equipment	100
Sales	26,000
Inventory, December 31, 1924	20,000

Prepaid insurance has a debit of $240. Insurance has expired to the amount of $40.

The Heat and Light account has a debit balance of $120, $40 of which has been used up.

Salaries accrued, $260.

Interest on Notes Receivable, $48.

Interest on Notes Payable, $72.

(a) Adjust the inventory account.

(b) Make entries showing depreciation of 10% on store equipment; 10% on delivery equipment.

(c) Set aside an allowance of 2% of sales for bad debts.

(d) Make the necessary adjusting entries.

(e) Set up the required accounts and post.

17. (1) On December 31, 1924, it is found that $800 of taxes must be paid for the preceding year, but these are not due until January 31, 1925.

(a) Make the proper entries for December 31, 1924 and January 1, 1925.

(b) Post the entries and close the accounts which balance.

(2) C. B. Wells rents a store to N. B. Welch at a monthly rental of $200. On October 31, 1923, two months' rent is due. Four months' rent is paid on November 30.

(a) Make journal entries to close the books on October 31.

(b) Post the entries to their accounts and close the accounts which balance.

(c) Journalize and post the entries for November 30.

(3) R. A. Wilson pays $2,400 insurance for one year on July 1.

(a) Make the entries necessary at the end of each of the first six months.

(b) Post all of the entries showing how the accounts stand on December 31.

(4) The Monthly Publishing Company receives yearly subscriptions of $48,000 on January 1.

(a) What entries are necessary to close the books on January 31?

(b) Show how these entries affect the various accounts and close the accounts which balance.

18. Make the following adjustments:

(1) Interest on Notes Receivable is $600, $200 of which should be deferred to subsequent periods.

(2) Four months' interest was paid to the bank on a $3,000 note. Interest at 6%. The note still has four months to run.

(3) There is a 6% mortgage payable of $14,000. Record the monthly interest.

(4) A part of a building was rented out at a monthly rental

of $200. The $200 due for the preceding month was not paid, nor was the fact recorded. There is $200 due for the present month.

(5) The Office Supplies account showed a balance of $450. Half of this is deferred.

(6) The Stationery account showed a balance of $100, $35 of which had been used.

(7) There were the following accrued wages:

Clerical	$200
Sales	400

(8) One month previous, a company had received $2,400 for a yearly subscription.

(9) An athletic association received $2,000, before December 31, when closing its books. These receipts were for a game to be played early in January.

(10) A note for $500 which a firm discounted at the bank is not paid because the maker has become bankrupt.

19. Analyze the following business situations and make the necessary adjusting entries:

(1) At the time of adjustment, the old inventory stood at $3,500. The new inventory was $4,500.

(2) The accounts show $3,000 of fuel on hand. However, one-half of this had been used up.

(3) Stationery and stamps amounting to $200 had been used up. The Office Supplies account showed that $300 of the total $500 had been consumed.

(4) A note receivable of $5,000 had been discounted at the bank two months prior to this date. The discount was $50. The note is due in two more months.

(5) An insurance policy for one year, amounting to $6,000, had been taken out one month prior to the date of closing. The premium of $240 had been paid at that time.

(6) Liability insurance to the amount of $200 had not been paid.

(7) Wages expense to the amount of $1,000 had been incurred at the time of closing. They were not due and payable until three days afterward.

(8) A concern had not yet received rent to the amount of $500. The amount, however, was due.

(9) A 60-day, 6% note for $3,000 had been received from a customer. He paid the interest in advance.

20. The following is the condition of the accounts of C. C. Adams on January 31, 1925:

Cash, $1,400; notes receivable, $2,000; accounts receivable $4,500, merchandise inventory, January 1, $10,000, delivery equipment, $2,400; furniture, $1,600; wages, $3,000; rent, $1,400; insurance, $260; advertising, $600; other expenses, $1,200; purchases, $12,000; sales, $22,000; accounts payable, $3,100; notes payable, $260, and C. C. Adams, $15,000.

Deferred and accrued items: Prepaid insurance, $160; rent due, $400; interest due on notes receivable, $200; interest due on notes payable, $25; wages due, $500; advertising used up, $200. The ending inventory is $14,000.

(a) Make a trial balance. (b) Set up the accounts requiring adjustments. Make the necessary adjusting entries and post. (c) Make a balance sheet and a statement of income and expense.

21. The following trial balance was taken from the books of B. E. Wells on December 31, 1924:

Cash	$ 12,000	......
Accounts Receivable	32,000	......
Notes Receivable	10,000	......
Merchandise Inventory, January 1	24,000	......
Furniture and Fixtures	1,600	......
Allowance for Depreciation on Furniture and Fixtures	......	$ 160
Delivery Equipment	2,800	......
Allowance for Depreciation on Delivery Equipment	......	560
Accounts Payable	......	18,000
Notes Payable	......	20,000
Purchases	40,000	......
Purchases Returns and Allowances	......	1,400
Freight and Cartage In	600	......
Sales	......	48,000
Sales Returns and Allowances	1,000	......
Sales Salary	3,200	......
Advertising	800	......
Delivery Expense	400	......
Rent	1,000	......
Insurance Prepaid	400	......
Heat and Light	200	......
B. E. Wells, Capital	......	42,480
B. E. Wells, Personal	600	......
	$130,600	$130,600

Supplementary data:

(1) Merchandise inventory, December 31, 1924, $28,000. Depreciation: 5% on furniture and fixtures, and 10% on delivery equipment. Allowance for bad debts, 2% on sales. Accrued expense: Accrued salaries, $200, interest on notes payable, $72. Accrued income on notes receivable, $40. Deferred charges: Coal on hand, $40, insurance expired, $80, auto supplies, $50.

Make the necessary adjusting entries.

22. The following trial balance is taken from the books of the Axel Manufacturing Company on December 31, 1924:

Cash	$ 5,000	......
Notes Receivable	33,000	......
Accounts Receivable	112,000	......
Merchandise Inventory, January 1, 1924	50,000	......
Office Furniture	1,000	......
Delivery Equipment	2,500	......
Allowance for Depreciation on Delivery Equipment	......	$ 500
Machinery and Tools	30,000	......
Allowance for Depreciation on Machinery and Tools	......	6,000
Building	12,000	......
Allowance for Depreciation on Building	......	600
Land	18,800	......
Accounts Payable	......	80,000
Bonds Payable	......	10,000
Capital Stock	......	100,000
Surplus	......	67,200
Sales	......	200,000
Sales Returns	500	......
Purchases	172,500	......
Discount on Purchases	......	200
Purchases Returns	......	300
Labor	12,000	......
Heat, Light and Power	1,000	......
Repairs, Machinery and Tools	1,200	......
Office Salaries	5,500	......
Stationery and Printing	500	......
Selling Expenses	2,000	......
Administrative Expenses	1,500	......
Insurance	2,000	......
Taxes	1,800	......
	$464,800	$464,800

Supplementary data:

The merchandise inventory on December 31, 1924 is $62,700. There is accrued interest on bonds to the extent of $200. Insurance to the amount of $300 has been used up. Depreciation: on office furniture 10%, on delivery equipment 20%, on machinery and tools 20%, and on buildings 5%. Set aside an allowance for bad debts of 1% on Sales.

(a) Prepare a balance sheet.

(b) Make an income statement.

(c) Make the journal entries necessary to record the accrued item and the deferred item mentioned in the supplementary data.

(d) Are the entries called for in (c) reflected in the reports?

VIII. ADJUSTING AND CLOSING ENTRIES

1. Distinguish the following expressions: Depreciation, depletion, appreciation, accretion, obsolescence.

2. Explain and give examples of the various methods of calculating depreciation.

3. Is it not true that depreciation should be shown on both the balance sheet and the statement of income and expense? If so, why is it that usually an allowance for depreciation on the balance sheet is larger than the expense account depreciation in the statement of income and expense?

4. Is it true, since repairs are made from time to time on fixed assets, that it is unnecessary to make allowances for depreciation? Repairs certainly do not decrease the value of the asset.

5. A machine is purchased for $5,000. What entries should be made if the machine were: (a) sold for its book value; (b) sold for more than its book value; (c) sold for less than its book value?

6. It is necessary nowadays for farmers to keep records for the purposes of the income tax. Farmer X uses a reaper throughout the harvesting season. His mower was left standing in the orchard and became so rusty that it could not be used. What would you do about depreciation in each case?

7. Y purchases a machine for $10,000. He feels that the machine will depreciate more the first year and that thereafter, each succeeding year, it will depreciate less. He decides to charge 10% yearly, following the declining method of calculation. Indicate how this is done.

8. It is estimated that a building costing $12,000 will last ten years. It is believed that at the end of ten years, it may be sold for $2,000. At the end of ten years, however, the building is sold for $2,500. Record at the end of the period.

9. A machine costs $9,000. Costs of installation are $500. It is believed that the machine will last 10 years. At the end of five years an invention is perfected, and is attached to the machine at an increased cost of $2,000. This will make the machine last five years longer—a total life of fifteen years, it is thought.

Record at the end of one year, five years, ten years, and fifteen years.

10. The Michigan Lumbering Company purchases land and timber for $100,000. The land is valued at $10,000. The timber is cut off in five years. The land is cleared for cultivation at the end of the sixth year at a cost of $2,000. Then the land is reappraised and it is believed that it has increased $10,000 in value. At the end of the seventh year the land is sold for $50,000. Make the record for each year.

11. A typewriter is purchased for $100. It is believed that the machine will last eight years and that it will have a scrap value of $20 at the end of that period. Suppose that the machine sells for $30 at the end of eight years? At $10? What entries should one make in each case?

12. A machine is purchased for $11,500. The freight charge on the machine is $100. The cost of installation is $400. It is estimated that the machine will last for twelve years. At the end of the sixth year, it is necessary to remodel at a charge of $2,000.

Record the transactions at the time of purchase, at the end of the first year, and at the end of the seventh year.

13. Does the federal income tax encourage the setting aside of depreciation? If so, does not this mean less income for the Government? Why, then, does the Government take this attitude?

14. An executive said, "My business has always made a profit. Why should I bother myself about this matter of depreciation?" What do you think?

15. "Accounting might perhaps be defined as the mechanism by which an attempt is made to make a periodical classification of the financial history of the business enterprise. The emphasis upon the period is responsible for virtually all accounting analysis. If the significant period were 50 years in length, for example, there would be no such thing as accounting in the ordinary sense."

Explain and criticize.

16. The automobile accessories shop deals altogether in accessories for automobiles. Name and give at least ten adjustment entries that might be required for a concern of this nature.

What procedure would you recommend for closing the books and making the financial statements at the end of the fiscal period?

17. On July 1, the Building account had a balance of $100,000. On that date, it was estimated that the value of the building was understated by one-fourth. An Allowance for Depreciation on Building account showed a balance of $20,000.

Make the entries to record the changes.

18. On January 1, a concern had a material inventory of $20,000. The inventory on January 31 was $6,000, and goods in process had an inventory of $1,000. Freight in was $100. Sales, $30,000. Sales returns and allowances, $1,000. Sales discounts, $500. Sales salaries, $1,000. Sales salaries accrued, $400. Accrued interest on notes receivable, $10. Insurance to the amount of $90 was used up. On January 31, rent for $400 had been earned but had not yet been received.

(a) Open the accounts.
(b) Make the necessary closing entries.
(c) Post the entries.

19. The books of Howard and John Smith are closed December 31. The inventory of materials for the beginning of the period, July 1, is $10,000, and the ending inventory is $12,000. During this period, materials to the amount of $23,000 were purchased; goods in process used $8,000, and an ending inventory of $3,000. Charges on freight are $300; goods were sold to the amount of $55,000 on which a discount of $1,400 was given. Damaged goods and unsatisfactory goods returned, $300. Inter-

est accrued on notes receivable, $300, and on notes payable, $450. Insurance paid, $150, and subscriptions also paid to the amount of $75.

Give journal entries, show accounts closed into controlling accounts, and distribute the net income.

20. The accounts of a firm afford the following information:

Material Inventory, December 1	$ 8,000
Material Inventory, December 31	9,000
Goods in Process Inventory, December 31	7,000
Purchases	20,000
Freight In	200
Sales Returns and Allowances	400
Sales	38,000
Sales Discount	800
Interest on Notes Receivable	100
Salesmen's Salaries	2,000
Insurance	1,000
Advertising	500

(a) Set up the information in accounts.

(b) Make the closing journal entries, closing through manufacturing and trading and expense and income accounts.

(c) Post the journal entries.

21. The books of a manufacturing and trading concern show the following information: Sales discount, $4,000; sales returns and allowances, $10,000; sales, $600,000; goods in process and ending inventory of, $50,000; materials, a beginning inventory of $550,000, and an ending inventory of $100,000. There is interest on notes receivable of $600; accrued salaries of $800; and salaries of $1,000. Insurance to the amount of $700 has been used up. The concern has earned $200 of a deferred credit on subscriptions.

(a) Open the accounts.

(b) Make the adjusting and closing entries.

(c) Post the entries.

22. Sometimes a business uses one interest account in which both interest received and interest paid are recorded. On August 1 the debit balance of such an account was $120; the credit balance, $150. During the month, interest was received, $175; interest paid, $275. On August 31, interest accrued on notes receivable was $60; interest accrued and unpaid, $110.

Give journal entries showing how the above information would be handled in the Interest account.

23. During a year, the purchases of a manufacturing and trading concern were $100,000. Material inventory at the beginning was $15,000; and at the end, $12,500. Goods in process had an ending inventory of $10,500. Sales for the year were $145,000, $5,000 of which had been returned. Purchase returns were $3,000. Advertising to the amount of $1,000 had been used up. Rent to the amount of $500 had been received but not yet recorded.

Half of the profits for the period were left in the business, and the remainder was paid out equally to the two partners.

(a) Open the accounts.
(b) Make the necessary journal entries.
(c) Post the entries.

24. At the end of an accounting period, the Expense and Revenue account contains a debit amount of $110,000; a credit amount of $140,000. The directors declare a dividend of half the net revenue.

Make the necessary entries, set up the required accounts and post.

25. The merchandise inventory of a company for January 31 was $4,500. For June 30 it was $6,500. Purchases on the latter date were $30,000; sales, $42,000. Purchases returns were $1,000 and sales returns were $800. Sales discounts were $120 and purchase discounts $145. There was a charge of freight in of $25.

Close the above accounts through the Purchase and Sales accounts to the Expense and Income account. Dispose of the balance.

26. The manufacturing concern of Haller and Bowman begins operations on January 1, 1924, with materials inventory of $38,000. The sales for the period ending June 30 are $125,000; freight in for the period, $800; sales returns, $1,250; sales discounts, $1,400; purchases are $29,000; salaries are $15,000.

On January 1, paid rent to the amount of $500 to run for one year. On June 30 they have $650 of rent due them. Salaries due at the time of closing the books to be paid on July 15, are

$1,050. A $5,000 insurance premium has been half used during the period.

(a) Open the accounts.
(b) Make the necessary entries.
(c) Post the entries.

27. After a month's business, the accounts of a manufacturing and trading concern show the following balances:

Materials, June 1	$36,000
Purchases of Materials	39,500
Materials Returned	325
Finished Goods, June 1	14,000
Sales Discounts	600
Sales	70,000
Discount on Purchases	615
Sales Returned	280
Finished Goods on hand June 30	8,200

(a) Open the accounts.
(b) Make the journal entries required to close the accounts.
(c) Post the entries.

28. At the beginning of 1924, a partnership engaged in a manufacturing and trading business had a materials inventory of $72,000. On December 31, the inventory was $5,000. During the course of the year the materials had been transferred to goods in process, all except $500 of which had been returned. There was an inventory of $7,000 in the goods in process account on December 31. Sales were $75,000. Of $600 prepaid insurance, $200 elapsed during the year. The concern had earned $150 on notes receivable but the amount had not yet been received. There was an accrued payroll of $225. The rent account showed a credit balance of $500, but only $200 had been earned. Purchase discounts were $400; sales discounts, $300; freight in, $75.

At the end of the period, half of the profits were paid to the two partners in equal amounts, and the remaining of the profits were kept in the business by the two partners in the same proportion.

(a) Open the necessary accounts.
(b) Make journal entries closing the accounts.
(c) Post the entries.

29. The Apex Manufacturing Company is a large concern wherein many stages of the productive process are carried on.

Labor, of course, is used at each stage of the productive process. Discuss the advisability of devising and keeping records for each stage in the process. That is, would it be better to devise intermediate summary accounts for each production center, and close therein each subsidiary account, or would general final summary accounts for the collection of all the data be more satisfactory?

30. Some companies make a practice of closing down the plant for a two-week period in order to take an inventory. Would it not be a better practice to take a perpetual inventory so all this expense would not be incurred, and in order that so much time would not be lost?

31. The Elite Tailoring Shop purchased goods for $10,000. The expenses of express, etc., were $25. It cost approximately $20 to place the goods in condition for sale. Ten days later, when an inventory was taken, a valuation of $8,000 was placed on this lot.

Was that evaluation correct? If so, how should the accounts be closed?

32. On December 31, 1924, the following adjustments are necessary on the books of the Cole Mercantile Company:

(1) On July 1, a premium of $160 had been paid on life insurance.

(2) A building is listed on the books at $50,000. The building has been used for two years, and the amount already placed on the Allowance for Depreciation account is $2,000.

(3) The sales for 1924 were $125,000. The Allowance for Bad Debts account shows a debit balance of $1,000. Two percent of sales was set up for the preceding year. The accountant recommends 3% for 1924.

(4) The merchandise inventory on December 31 is $8,900. On January 1, it was $6,200.

(5) Wages accrued are $1,200. This amount is chargeable equally to Administrative, Buying, Selling, and Delivery expense.

(6) Interest accrued on notes receivable is $45.

(7) Delivery equipment was purchased on December 1 for $8,200. It is believed that at the end of six years that asset will have a scrap value of $1,000.

(8) Interest accrued on notes payable is $55.

(9) On December 1, $4,000 was borrowed from the Harris Trust Company at 6% for ninety days.

(10) One year's supply of stationery had been purchased on November 1, 1924.

33. The Sanborn Company began operations on January 1, 1925. During the month, materials to the amount of $25,000 were purchased. The costs of labor were $32,000. Payments for materials to the amount of $5,000 were made; $30,000 was paid for labor. For special services which are to cost $3,000, advance payment of $1,000 was made. All of the above costs were carried to finished goods except $4,000 of materials. On January 31, the finished goods on hand was $4,000. Sales of $20,000 were made.

Make the necessary journal entries, open the accounts and post the entries. Determine the net revenue from the data given.

34. Wills and Williams are practicing accountants. During the month of March, their accounts showed the following information: Services rendered, $5,000; telegraph and telephone, $25; heat and light, $100; stenographer's services, $100; service of typist, $75; taxi bills, $35; out-of-town trips, $200; office rental, $300; stationery and postage, $25; interest on a note payable, $10; insurance on office equipment, $12. They paid a year's insurance of $120 on their library. The office furniture showed a cost of $5,000. They estimate that it depreciates $600 yearly. Depreciation on an automobile amounts to $15 monthly.

Set up the necessary accounts and close into an Expense and Revenue account, into a Net Revenue account and then into the capital accounts.

35. The Bixby Company spends $50,000 during July for materials, and $24,000 for labor. The inventories at the beginning of the period were: Finished goods, $18,000; supplies, $2,500; materials, $12,000. Costs for accrued items were $23,000.

Sales during the period were $150,000. At the end of the period there were $15,000 of materials on hand; the material cost of finished goods was $14,000. The labor cost of finished goods was $8,000. There were additional charges to finished goods of $4,500.

Make the entries and set up the necessary accounts and post. What is the net revenue?

36. A partnership starts business on October 1, with a merchandise inventory of $3,200. During the month, sales amounted to $5,000 and purchases amounted to $4,500. Salaries of $200 were paid, as were other expenses of $60. Rent of $240 was paid, one-fourth of which applies to October. The merchandise inventory at the end of the month was $4,600. During October, each partner withdrew $300.

Set up the necessary accounts, together with an Expense and Revenue account. Make the journal entries and close, dividing the profits equally between the partners.

37. The following accounts, among others, appeared on the books of the American Mercantile Company on December 31, 1924:

Interest on notes receivable, $50; purchase discounts, $400; sales, $75,000; purchase returns and allowances, $1,000; federal taxes, $500; purchases, $45,000; depreciation, $600; sales discounts, $200; renewals, $300; sales returns and allowances, $2,000; interest on notes payable, $25; contingencies, $500; sinking fund, $600; delivery expense, $1,000; insurance on warehouse, $200; sales clerk salary, $150; stationery and supplies, $50; merchandise inventory, December 1, $15,000; merchandise inventory, December 31, $20,000; selling expense, $2,000; administrative expense, $5,000; traveling expense for buying purposes, $500; heat and light, $75; depreciation on delivery equipment, $50; repairs, $300; gift from a benefactor, $1,000; contribution to Red Cross, $50; withdrawals, $200, and advertising, $100.

(a) Set up the above accounts.

(b) Close through Purchases, Sales, Expense and Income, Net Revenue to Surplus.

IX. THE TEN-COLUMN STATEMENT

1. The ten-column statement is merely a convenient device for simplifying the closing operations. Explain just how the work can be simplified through the use of this device.

2. Explain why it is that the final balancing figure in the ten-column statement "proves" the accuracy of the work.

3. The closing journal entries may be read directly from the various columns in the ten-column statement. Explain just how the statement can be used for this purpose.

4. "The principle of the ten-column working sheet can be expanded indefinitely. Provision can be made for the sub-division of the expense and revenue columns to secure a more detailed analysis of these items. Likewise the net revenue and surplus columns can be subdivided. In fact, the number of columns which may be used depends upon the extent to which detail classification is desired."

(a) What additional columns might be added for a manufacturing establishment?

(b) Rule up a form which might be used with additional columns and explain how the various classes of accounts would be treated in the statement.

5. Construct a rule which could be followed in preparing a ten-column statement. Such a rule should explain just how each debit item and each credit item in the trial balance must be accounted for in the remaining columns.

6. Explain how depreciation of buildings is taken into account on the ten-column statement in case a valuation account is used.

7. The Accounts Receivable account shows a debit balance of $10,000 on the trial balance and the Allowance for Uncol-

lectible Accounts has a credit balance of $500. It is estimated that the uncollectible accounts for the ensuing period will be $1,500. How should the adjustments be made on the ten-column working sheet?

8. The Wages account has a debit balance as shown by the trial balance. Accrued wages of $5,000 must be taken into account. How is the situation handled?

9. If the Interest account shows a debit balance and it is necessary to recognize accruals on both notes receivable and notes payable, how will these items be treated on the statement?

10. Explain how dividends declared but not yet paid should be recognized in the preparation of a ten-column working sheet.

11. The following is the trial balance of the Bennett Manufacturing Company, as of December 31, 1924:

Plant and Equipment	$100,000	......
Raw Materials, Inventory, January 1	35,000	......
Raw Materials Purchases	95,000	......
Goods in Process, Inventory, January 1	30,000	......
Finished Goods, Inventory, January 1	25,000	......
Cash	6,000	......
Accounts Receivable	125,000	......
Capital Stock	......	$200,000
Notes Payable	......	25,000
Accounts Payable	......	64,000
Labor, Direct	210,000	......
Labor, Indirect	35,000	......
Manufacturing Expense	96,000	......
General Expense	25,000	......
Selling Expense	41,000	......
Interest	1,000	......
Sales	......	510,000
Surplus	......	25,000
	$824,000	$824,000

The inventories and adjustments for December 31, were as follows: Raw materials, $42,000; goods in process, $27,000; fin-

ished goods, $28,000; interest accrued on notes payable, $800; wages accrued, $1,200 on direct labor and $400 on indirect labor; taxes accrued, $350; depreciation at the rate of 10% on plant and equipment. Prepare a ten-column statement.

12. From the following trial balance and inventories of the Wheeler Manufacturing Company, prepare a ten-column statement.

	Dr.	*Cr.*	*Inventories*
Capital Stock	......	$100,000	......
Notes Payable	......	50,000	......
Building	$ 25,000	......	$ 20,000
Allowance for Depreciation of Building	......	4,500	......
Equipment	105,000	......	95,000
Allowance for Depreciation of Equipment	......	5,000	......
Materials	40,000	......	43,000
Accounts Receivable	90,000	......	89,000
Allowance for Uncollectible Accounts	......	500	......
Accounts Payable	......	80,000	......
Sales	......	100,000	......
Purchases	50,000	......	......
Labor	20,000	......	1,500 Cr.
Manufacturing Expense	15,000	......	500
Taxes	......	......	3,000 Cr.
Interest	......	......	3,000 Cr.
Surplus	......	5,000	......
	$345,000	$345,000	

It will be noticed that there is a difference of $5,000 between the debit balance in Buildings, and the inventory. There is a credit balance of $4,500 in Allowance for Depreciation of Buildings. What was the depreciation on buildings for the period covered by this statement? What was the origin of the $4,500 item already in the Allowance for Depreciation account?

The inventory of materials is shown as $43,000 whereas the balance in the materials account is $40,000. Does this mean that a profit of $3,000 was made on materials? Explain how this situation could occur.

Explain why there is a balance of $500 in Allowance for Un-

collectible Accounts. Is there any connection between this item and the inventory figure of $89,000 in Accounts Receivable?

There are three inventory figures marked *Cr.* Explain in each case what the item means and the relation it bears to the amount involved.

13. Prepare a ten-column statement from the following trial balance and inventories:

Trial Balance, December 31, 1924

	Dr.	*Cr.*
Land	$ 30,000	$ 5,000
Buildings and Fixtures	55,000	......
Allowance for Depeciation	......	4,500
Inventory, December 31, 1923	20,000	......
Purchases	70,000	......
Labor	25,000	......
Supplies	3,000	......
Freight	4,000	......
Purchases Discounts	......	1,500
Sales	......	150,000
Cash	21,500	......
Interest	2,000	3,000
Notes Payable	......	36,000
Capital Stock	......	87,200
Accounts Payable	......	35,000
Repairs	2,000	......
Accounts Receivable	40,000	......
Insurance	1,200	......
Securities Owned	30,000	......
Sales Allowances	1,000	......
Commissions	5,000	500
Sales Expense	6,500	......
Advertising	6,500	......
	$322,700	$322,700

Inventories, December 31, 1924: The present value of the land owned is $36,000. Buildings and fixtures are valued at $50,000. Merchandise inventory, $12,000. Accrued wages, $1,500. Supplies on hand, $500. Interest accrued on notes, $800. Unexpired insurance, $200. Accrued taxes, $1,500. Securities have declined in value by $2,000.

There are debit and credit items shown in the Interest account but there are no notes receivable shown in the trial balance.

How is it possible for this situation to exist? Explain what type of transaction gave rise to each of the items shown on the Interest account. Is it good accounting practice to enter unlike items in the same account? Can you justify the practice of the company as evidenced by the Interest account?

14. The following is a trial balance of the Gordon and Bennett partnership taken on December 31, 1924:

	Dr.	*Cr.*
Plant and Machinery	$150,000	......
Allowance for Depreciation on Plant and Machinery	......	$ 5,000
Furniture and Fixtures	7,000	......
Allowance for Depreciation on Furniture and Fixtures	......	350
Advertising	2,000	......
Purchases, Materials	200,000	......
Factory Payroll	250,000	......
Accounts Receivable	30,000	......
Allowance for Doubtful Accounts	......	500
Power costs	20,000	......
Cash	13,650	......
Salesmen's Expenses	6,000	......
Accounts Payable	......	60,000
Insurance	1,200	......
Interest on Mortgage	1,000	......
Interest on Notes Receivable	......	2,000
Gordon, Capital	......	126,000
Bennett, Capital	......	71,000
Notes Receivable	75,000	......
Materials, Inventory, January 1, 1924	15,000	......
Finished Goods, Inventory, January 1, 1924	20,000	......
Factory Expenses	7,000	......
Mortgage on Plant and Machinery	......	20,000
Sales Allowances	1,500	......
Freight	1,000	......
Sales	......	550,000
Rent	7,500	......
Office Salaries	25,000	......
Office Expenses	2,000	......
	$834,850	$834,850

Depreciation of the plant and machinery is estimated at $6,000 and of the furniture and fixtures at $350. The accrued

factory payroll amounts to $1,500. It is estimated that $3,000 of the accounts receivable are uncollectible. The insurance was paid for three years from January 1, 1924. Interest accrued on notes receivable amounts to $1,000. Materials inventory, $18,000; finished goods inventory, $24,000.

Prepare a ten-column statement.

15. The following is the trial balance for the Bedford Shoe Company on December 31, 1924:

Capital Stock	....	$250,000
Surplus	....	142,000
Allowance for Depreciation on Plant and Machinery	....	20,000
Allowance for Uncollectible Accounts	....	9,600
Inventory, Finished Goods, Jan. 1, 1924	$ 32,000	....
Inventory, Raw Materials, January 1, 1924	45,000	....
Purchases	135,000	....
Sales	....	379,680
Discounts on Purchases	....	1,730
Discounts on Sales	2,500	....
Goods Returned	3,650	....
Wages	135,500	....
Power Costs	17,000	....
Repairs to Machinery	2,800	....
Factory Expense	9,500	....
Insurance	2,200	....
Plant and Machinery	125,000	....
Salaries	37,000	....
Notes and Accounts Receivable	200,000	....
Notes and Accounts Payable	....	30,000
Furniture and Fixtures	4,000	....
Cash	75,500	....
Taxes	960	....
Advertising	5,400	....
	$833,010	$833,010

Depreciation at the rate of 5% on plant and machinery for the year. Allow 2% additional for uncollectible accounts. Inventories of finished goods, $46,000; raw materials, $50,700; furniture and fixtures, $3,580 on December 31.

Prepare a ten-column statement.

16. In the following statement, the balance sheet and income sheet items of a ten-column statement are listed. (There are no net revenue items involved.) From the information given make up the trial balance that was used in preparing the statement.

	Balance Sheet		Income Sheet	
	Asset	*Liability*	*Dr.*	*Cr.*
Cash	$ 5,500	......	......	......
Land	10,000	......	......	......
Equipment	10,000	......	......	......
Allowance for Depreciation on Equipment	......	$ 1,800	$ 600	......
General Expenses	......	......	8,000	......
Commissions	250	......	......	$ 950
Accounts Payable	......	15,000	......	......
Rent	......	200	......	100
Merchandise	1,300	......	2,700	......
Purchases	......	......	15,000	......
Sales	......	......	......	50,000
Labor	......	500	12,500	......
Accounts Receivable	40,000	......	......	......
Capital Stock	......	25,000	......	......
Surplus (after net profit has been added)	......	17,300	......	......

X. WORKING SHEET

1. Explain the essential differences between the ten-column statement and the working sheet.

Do you understand that the working sheet displaces the ordinary reports in any way?

2. It will be admitted that the result of the balance sheet does not equal the result of the statement of income and expense. How does it happen, then, that the results of these two reports on the working sheet do, or should, balance? How do you account for this?

3. Explain two methods of handling Merchandise Inventory on the working sheet. What do you think of the relative merits of the two?

4. "To facilitate the making of these adjustments the accountant frequently makes use of the working sheet, by means of which he is able to summarize the information which is to go into the reports."

Is this the only value in a working sheet?

5. "An examination of the profit and loss columns of the working sheet shows what account must be closed in order to summarize the results of the period's operations." Is this true?

6. "It is customary to transfer the amount of the accrued items back to the appropriate income or expense accounts after the books have been closed."

How is this shown on a working sheet?

7. "For the purpose of incorporating the adjustments in the trial balance and then separating the accounts into the two groups, namely, those which are to be summarized in the profit and loss statement and those which are to be used for the balance sheet, a regular form is used, known as the accountant's 'work sheet.'" Explain.

8. "The student must understand that the work sheet is no part of the formal accounting record, nor is the procedure employed by it a part of the formal work of closing the books."

Is this strictly true? Explain and criticize.

9. In the working sheet, the credit balance of the Capital account appears in the balance sheet columns on the right. Where should a deficit be placed?

Should a Personal account with a debit balance be placed in the balance sheet or the statement of income and expense, on a working sheet? Does it make any difference in the final result where it is placed?

10. From the following trial balance and supplementary data taken from the books of L. A. Louden, on January 31, 1925, make a working sheet.

Cash	$ 3,000	......
Accounts Receivable	8,000	......
Notes Receivable	500	......
Merchandise Inventory, January 1	10,000	......
Furniture and Fixtures	5,000	......
Allowance for Depreciation on Furniture and Fixtures	......	$ 500
Delivery Equipment	20,000	......
Allowance for Depreciation on Delivery Equipment	......	5,000
Buildings	15,000	......
Allowance for Depreciation on Buildings	......	2,000
Bonds	20,000	......
Land	16,000	......
Accounts Payable	......	3,000
Notes Payable	......	600
Mortgage Payable	......	10,000
Sales	......	65,000
Purchases	24,000	......
Advertising	1,500	......
Sales Salaries	2,000	......
Office Supplies	1,000	......
Office Salaries	5,000	......
Delivery Expense	600	......
Interest on Mortgage	1,000	......
L. A. Louden, Capital	......	46,500
	$132,600	$132,600

Ending inventory, $14,000. Depreciation on furniture and fixtures, 8%, buildings, 4%. Allowance for bad debts 2% of accounts receivable. Interest on bonds, $1,000; on mortgage payable, $400.

11. "The trial balance of a working sheet should not be totaled until the final results of the working sheet are determined." What difference does it make when the trial balance is totaled? There are not any changes in the trial balance anyway, are there?

12. Jones & Smith

Trial Balance, December 31, 1924

Cash	$ 2,370.00	....
Accounts Receivable	2,470.00	....
Notes Receivable	2,800.00	....
Merchandise Inventory, January 1	8,575.00	....
Office Furniture	860.00	....
Machinery and Tools	24,820.00	....
Allowance for Depreciation on Machinery and Tools	....	$ 4,964.00
Delivery Equipment	2,500.00	....
Allowance for Depreciation on Delivery Equipment	....	500.00
Building	18,000.00	....
Allowance for Depreciation on Building	....	900.00
Land	15,000.00	....
Purchases	87,675.00	....
Purchase Discounts	....	770.00
Sales	....	80,785,00
Sales Returns and Allowances	515.00	....
Accounts Payable	....	3,410.00
Bonds Payable	....	10,000.00
Jones, Capital	....	34,720.50
Smith, Capital	....	34,720.50
Heat, Light and Power	245.00	....
Taxes	150.00	....
Stationery and Printing	550.00	....
Administrative Expense	840.00	....
Office Salaries	600.00	....
Labor	825.00	....
Insurance	375.00	....
Selling Expense	1,600.00	....
	$170,770.00	$170,770.00

Supplementary data: Inventory, December 31, 1924, $9,000; used stationery and printing, $250; interest on notes payable, for $100, is due, but not yet paid. Set aside an allowance for bad debts of 2%.

Make a working sheet.

13. "As all items of accrued expense and deferred income represent liabilities, these adjustment figures are carried directly to the credit column of the balance sheet; and as all accrued income and deferred charges represent assets, the figures are carried to the debit side of the balance sheet."

Explain and give examples of each case.

14. Write a report pointing out the particular accounts which are likely to need adjustment on the working sheet. Give examples and explain in each case.

The following trial balance may be used as a basis of the report:

P. B. CALHOUN

Trial Balance, January 1, 1925

Cash	$ 6,000	....
Accounts Receivable	14,000	....
Reserve for Bad Debts	......	$ 2,000
Bills Receivable	6,000	....
Prepaid Insurance	4,000	....
Prepaid Advertising	2,000	....
Patents	12,000	....
Copyrights	5,000	....
Delivery Equipment	10,000	....
Reserve for Depreciation on Delivery Equipment	......	1,000
Building	15,000	....
Reserve for Depreciation on Building	......	5,000
Land	20,000	....
Accounts Payable	......	17,000
Bills Payable	......	11,000
Mortgage Payable	......	20,000
Commissions	1,200	....
Advertising	1,300	....
Administrative Expense	6,000	....
Wages	3,500	....
Insurance	300	....
Stationery	800	....
Sales	......	60,000
Merchandise Inventory	12,000	....
Purchases	25,000	....
Interest	900	....
P. B. Calhoun, Personal	1,000	....
P. B. Calhoun, Capital	......	30,000
	$146,000	$146,000

How might insurance, advertising, patents, copyrights, interest, wages, inventory, and stationery be affected? Suggest as many additional adjustments as possible.

15. Alliance Mercantile Company

Trial Balance, December 31, 1925

Cash	$ 22,000	....
Petty Cash	1,000	....
Accounts Receivable	102,000	....
Allowance for Bad Debts	....	$ 1,400
Notes Receivable	5,000	....
Merchandise Inventory, January 1	198,000	....
Prepaid Insurance	2,000	....
Prepaid Advertising	6,000	....
Securities	10,000	....
Furniture and Fixtures	18,000	....
Allowance for Depreciation on Furniture and Fixtures	....	4,000
Delivery Equipment	5,000	....
Allowance for Depreciation on Delivery Equipment	....	500
Building	12,000	....
Allowance for Depreciation on Building	....	2,000
Land	20,000	....
Accounts Payable	....	16,000
Notes Payable	....	5,000
Capital Stock	....	100,000
Surplus	....	103,400
Sales	....	400,000
Sales Returns and Allowances	4,400	....
Purchases	200,000	....
Purchase Returns and Allowances	....	5,000
Rental	2,000	....
Advertising	8,000	....
Selling Expense	4,000	....
Salesmen's Salaries	18,000	....
Delivery Expense	5,000	....
Office Salaries	10,000	....
Stationery and Printing	500	....
Interest Paid	400	....
Interest Received	....	10,000
Sales Discount	6,000	....
Purchase Discounts	....	12,000
	$659,300	$659,300

Supplementary data: The inventory on December 31, 1925, was $175,000; depreciation on furniture and fixtures, 8%, on delivery equipment, 10%, and on building, 5%; interest accrued on notes payable, $300; interest accrued on notes receivable, $700; accrued income on securities, $1,000. Deferred charges: Insurance, $500; advertising, $1,000; unpaid wages for delivery, $200; sales salaries unpaid, $500; $500 of rental should be

charged to succeeding period; allowance for bad debts, 1% of accounts receivable.

Make a working sheet.

16. THE SIMPSON COMPANY

Trial Balance, December 31, 1924

Surplus	....	$ 76,250
Land	$ 10,000	....
Buildings	3,000	....
Machinery and Tools	4,500	....
Furniture and Fixtures	1,500	....
National Bank	2,000	....
Petty Cash	100	....
Accounts Receivable	42,000	....
Notes Receivable	7,000	....
Notes Receivable Discounted	....	2,500
Patents	3,500	....
Mortgage Payable	....	6,200
Accounts Payable	....	5,300
Materials	36,000	....
Hardware	50,000	....
Machinery	196,000	....
Freight In	3,000	....
Productive Labor	16,000	....
Non-Productive Labor	8,000	....
Shop Supplies	1,000	....
Heat, Light and Power	3,000	....
Machinery Repairs	1,200	....
Factory Expense	500	....
Hardware Sales	....	75,000
Machinery Sales	....	252,000
Hardware Returns and Allowances	250	....
Machinery Returns and Allowances	3,000	....
Advertising	14,000	....
Salesmen's Salaries	3,500	....
Salesmen's Traveling Expenses	1,200	....
Freight Out	1,300	....
Selling Expense	700	....
Office Expense	1,400	....
Office Salaries	4,500	....
Stationery and Printing	300	....
Telephone and Telegraph	100	....
Insurance	200	....
Interest	350	....
Taxes	250	....
Purchases Discounts	....	2,200
Sales Discount	100	....
	$419,450	$419,450

Supplementary data:

Inventories December 31: Hardware, $6,000, and machinery, $25,000.

Depreciation: On building 10%, furniture and fixtures 6%, and on machinery and tools 8%.

Patents expired, $1,000; advertising deferred, $6,000; accrued wages, productive, $4,000; accrued wages, non-productive, $500; accrued taxes, $100; insurance unexpired, $75; interest accrued on mortgage, $200; interest accrued on notes receivable, $25, and interest accrued on notes payable, $20.

Allowance for bad debts of 2% of accounts receivable.

Prepare a working sheet.

17. Consider the following data:

		Ledger Balances	*Inventories*
(1)	Land	$ 15,000	$20,000
(2)	Buildings	60,000	51,000
(3)	Machinery	30,000	26,000
(4)	Allowance for Depreciation on Fixed Assets	6,000	......
(5)	Merchandise Inventory	40,000	45,000
(6)	Accounts Receivable	80,000	......
(7)	Allowance for Uncollectible Accounts	4,800	......
(8)	Accounts Payable	64,500	......
(9)	Sales	100,000	......
(10)	Purchases	50,000	......
(11)	Payroll	17,000	......
(12)	Expense Account	13,000	......
(13)	Capital Stock	100,000	......
(14)	Notes Payable	50,500	......
(15)	Undivided Profits	4,000	......
(16)	Leasehold (Asset)	25,000	15,000
(17)	Allowance for Depreciation on Leasehold	5,000	......
(18)	Cash	9,000	8,960
(19)	Discount on Purchases	1,000	......
(20)	Dividends Payable	4,000	......
(21)	Loss by Fire	5,000	......
(22)	Interest	1,000	500 Cr.
(23)	Reserve for Taxes	5,000	......
(24)	Rent	200	......

The following facts are given as additional information: Unpaid wages amount to $2,000; prepaid expenses inventory, $3,000; allowance for bad debts for the period is estimated at 2 percent

of the total sales; the total allowance needed for taxes for the year is estimated at $10,000; the board of directors declare a 5 percent dividend payable January 31, 1925.

(1) Prepare a working sheet.

(2) Discuss account numbers (6) and (7), (a) as to their meaning in the trial balance, (b) the reason for the adjustment.

(3) What type of account does number (12) represent in the trial balance?

(4) What type of account is number (17)? Why is such an account used?

(5) Explain the nature of account number (22), and the reason for the inventory. What change in status of the account occurs after the adjustment is made?

(6) Should Rent be closed through Expense and Revenue or Net Revenue?

Use the following additional data as a basis for discussion of the working sheet:

Suppose that no allowances for depreciation appear on the working sheet. Is it proper, under the circumstances, to credit in the adjustment columns, the assets upon which each new allowance depends? Would it be better to set up a new account for each allowance? As a matter of fact, does it make any difference which procedure is followed? What is the final effect in each case?

Finally, how is the accuracy of all the entries made in closing, checked on the working sheet?

Is there any check for accuracy in adjusting and closing entries on the working sheet? Are adjustments facilitated on the working sheet? If so, is not this form more satisfactory than the ten-column statement?

When there are a great many expense and income items handled in the adjustment columns, what device might be used to avoid setting up a number of new accounts at the end of the trial balance?

Is it true that the accounting process is worked out and proved on the working sheet before the making of the journal entries?

What should the accountant do in case he finds that the allowance for bad debts of the last period is not sufficient to satisfy the total loss from bad debts? Can you see any criticism to the method you suggest?

18. The trial balance of Charles Colby on December 31, 1924, was as follows:

Cash	$ 2,500	
Accounts Receivable	18,000	
Allowance for Bad Debts		$ 300
Notes Receivable	3,000	
Merchandise Inventory, January 1, 1924	36,000	
Furniture and Fixtures	9,000	
Allowance for Depreciation on Furniture and Fixtures		1,800
Delivery Equipment	6,000	
Allowance for Depreciation on Delivery Equipment		2,000
Building	24,000	
Allowance for Depreciation on Building		8,000
Land	7,000	
Accounts Payable		8,000
Notes Payable		2,000
Mortgage Payable		14,000
Charles Colby, Capital		69,485
Charles Colby, Personal	1,000	
Sales		175,000
Sales Returns and Allowances	600	
Purchases	125,000	
Purchase Returns and Allowances		300
Sales Salaries	4,200	
Freight In	1,800	
Advertising	8,200	
Office Salaries	7,000	
Delivery Expense	25,000	
Postage	150	
Stationery and Printing	440	
Telephone and Telegraph	200	
Insurance	1,500	
Bad Debts	220	
Sales Discounts	650	
Interest Paid	420	
Purchase Discounts		820
Interest Received		175
	$281,880	$281,880

Supplementary data:

1. Inventory, December 31, 1924, $40,000.
2. Depreciation: On delivery equipment 8%, on furniture and fixtures 6%, and on building 4%.
3. Allowance for bad debts, 2% of sales.
4. Deferred charges: $2,000 of advertising unused. Stationery and printing, $140. Insurance, $1,000.

5. Accrued Items: Sales salaries, \$200; office salaries, \$1,000; telephone and telegraph, \$25; interest on notes receivable, \$25; and interest on notes payable, \$20.

Make a working sheet.

19. The following is the trial balance of the Universal Manufacturing Company on December 31, 1924:

THE UNIVERSAL MANUFACTURING COMPANY

Trial Balance, December 31, 1924

Patents	\$ 12,000	....
Power	10,000	....
Sales	....	\$520,000
Accounts Payable	....	22,000
Interest on Bonds	1,200	....
Land	14,000	....
Accounts Receivable	150,000	....
Office Payroll	8,000	....
Allowance for Bad Debts	....	7,000
Capital Stock	....	100,000
Sales Allowances	5,200	....
Taxes for Personal Property	560	....
Freight Out	5,300	....
Bonds	....	22,000
Allowance for Depreciation on Machinery	....	6,000
Postage	1,000	....
Insurance on Merchandise	320	....
Factory Expenses	1,500	....
Sales Returns	20,000	....
Machinery	25,000	....
Purchases	222,000	....
Productive Labor	150,000	....
Officers' Salaries	8,200	....
Salesmen's Traveling Expenses	7,500	....
Allowance for Depreciation on Building	....	2,250
Stationery and Printing	1,500	....
Allowance for Depreciation on Furniture and Fixtures	....	1,200
Buildings	25,000	....
Tools	3,200	....
Patterns	2,400	....
Notes Receivable	7,000	....
Insurance on Buildings	150	....
Taxes on Real Estate	700	....
General Interest	4,000	....
Cash	15,000	....
Unproductive Labor	23,000	....
Building Repairs	420	....
Machine Repairs	600	....

Merchandise Inventory, January 1, 1924	35,000	....
Office Furniture and Fixtures	2,300	....
Obsolescence on Patent	....	2,500
Telephone and Telegraph	800	....
Freight In	12,000	....
Cartage	1,000	....
Salesmen's Salaries	18,000	....
Surplus	....	64,900
Notes Payable	....	52,000
	$799,850	$799,850

Supplementary Data:

Inventories December 31, 1924: Tools $2,500, patterns $2,000, and merchandise $42,000.

Depreciation: On patents 8%, buildings 5%, machinery 10%, and on furniture and fixtures 10%.

Half of the insurance has been used up.

Allowance for bad debts of 2% of sales.

(1) Rearrange the trial balance in a proper order, and make a working sheet.

(2) Prepare a report form of balance sheet for December 31, 1924.

(3) Prepare income sheet.

XI. THE STATEMENTS

1. The questions and problems of the preceding six chapters have centered about the technique or mechanism of accounting. The main question involved in these chapters was how the accounting data were gathered into original records, posted into books of account and finally summarized into statement form. In this chapter the form and content of the statements thus prepared will be considered.

State in your own words the purposes which the principal accounting statements should serve. Why is it important to have these purposes in mind when constructing an accounting system?

2. It has been said that the balance sheet is the foundation of all accounting. It is the origin and terminus of all accounts.

Having in mind the processes of accounting as you have used them in earlier problems, explain why this statement is true.

3. "The balance sheet shows the status of the business at a particular date." Is this statement true? If so, how do you read the status of a business from the balance sheet?

4. What are the important comparisons to be brought out in a balance sheet statement?

5. One of the requirements in obtaining a loan at a bank is a balance sheet of recent date. What particular facts does a banker wish to obtain from such a statement?

6. What do you understand by the term *working capital?* How would you obtain a figure showing the amount of working capital from a balance sheet statement?

7. Some corporations prepare their balance sheets in two parts. The first is called the *current account balance sheet* and the second part, the *capital account balance sheet.* Explain how such a division is made and what purposes are served by a subdivision of the statement.

8. For what purposes are income sheets prepared? What facts are properly presented in a classified income sheet?

9. Distinguish between *operating net revenue* and *total net revenue.* Might a corporation's income sheet show an item of operating net revenue and a total net loss? Explain.

10. How would you classify the following items in an income sheet: Interest on bank loans, interest on bonds, taxes, rent, dividends received, dividends paid?

11. What item on the balance sheet serves as a connecting link with the income sheet?

12. It is sometimes said that the double entry system affords two independent paths to the same goal, namely, net profits. Explain what is meant by this statement. Are the two paths really independent?

13. The following is a list of the items in the balance sheet of Gimbel Brothers, Incorporated, for January 31, 1924:

Land, Buildings and Improvements	$16,120,664
Leaseholds	630,478
Store Fixtures	2,730,455
Sundry Investments	170,841
Cash	6,832,071
Accounts Receivable	11,087,236
Inventories	15,748,572
Marketable Securities	267,809
Cash in Building Fund	800,247
Goodwill	1
Prepaid Expenses	357,593
Common Stock and Surplus	25,689,667
Preferred Stock	18,000,000
Trade Creditors	4,744,441
Sundry Creditors	1,657,244
Officers, Stockholders and Related Interests (Cr.)	1,365,183
Dividends Payable	315,000
Reserve for Federal Taxes	2,550,000
Reserve for Insurance and Pensions	178,451
Interest Received in Advance	245,981

(a) Prepare a classified balance sheet in report form.
(b) Prepare a statement of working capital.
(c) What are the important comparisons brought out in your statements?

14. The following facts were taken from the published report of a large oil producing company. The income sheet figures are for the year ending December 31, 1923, and the balance sheets were for December 31, 1922 and 1923.

Income sheet items:

Oil sales, $3,480,144; Royalties (income), $62,336; Other income, $144,222; Increase in oil inventory, $194,146; Oil purchased, $406,790; Operating expenses, $631,304; Depreciation of plant and equipment, $346,029; Depletion, $100,640; Storage (expense) $47,566; Abandoned leases and wells, $196,210; Taxes, $228,080; General and administrative expenses, $364,074; Income charges, $30,986; Preferred dividends, $536,856.

Balance Sheets for December 31

Assets	*1923*	*1922*
Oil and gas rights	$27,129,217	$27,085,880
Leases developed	425,976	220,399
Land and leases undeveloped	905,146	943,303
Corsicana properties	301,750	301,750
Louisiana lands	80,060	....
Development and equipment	3,707,303	2,298,300
Furniture and fixtures	33,201	23,113
	$32,582,653	$30,872,745
Less reserve for depreciation and depletion	3,333,899	2,893,127
Balance	$29,248,754	$27,979,618
Due from Southwestern Development Co.	4,795,794	4,867,890
Notes receivable in hands of Trustees	2,250,000	2,550,000
Accrued interest on above notes	78,750	89,250
Cash in hands of trustees	64,321	68,719
Oil on hand	756,467	562,321
Notes receivable	167,628	186,965
Accounts receivable	313,580	200,184
U. S. Government securities	200,000	200,421
Interest accrued on U. S. Government securities	7,157	7,985
Working funds in hands of employees	11,519	2,672
Cash in bank and on hand	344,086	675,456
Patents	....	2,500
Deferred charges	....	21,767
	$38,238,056	$37,415,748

Liabilities		
Preferred stock	$ 8,947,600	$ 8,947,600
Common stock	24,968,600	24,968,600
Reserve for redemption of accrued dividend certificates	535,467	634,550
Accounts payable	220,968	262,520
Taxes accrued	225,077	255,244
Reserve for possible losses in litigation	1,773	976
Undivided profits	3,338,571	2,346,258
	$38,238,056	$37,415,748

(a) Rearrange the material into classified income sheets and balance sheets.

(b) Prepare a statement of working capital for the two years.

(c) State in narrative form the important facts concerning the operation of the business for the year 1923.

15. "The word *profit* is used in such a great many ways that it is not good practice to include the term in the accounting statements." Do you agree with the statement in the quotation? Show how different meanings might be applied to the term in an income sheet. Just what item in the income sheet comes nearest to expressing pure profit in the economic sense?

16. "The income sheet shows the dispersion of the gross income from the sale of a firm's product or service among the various interests and forces employed in production." Explain what is meant by this statement.

17. Draw up in outline form a classified balance sheet and income sheet for a manufacturing company.

18. The following is a list of the various items in the published income sheet of the American Cyanamid Company for the year ended June 30, 1923:

Sales, $8,999,674; Freight allowances on sales, $417,596; Cost of sales, $5,936,679; Selling and general expenses, $443,783; Interest (Dr.), $52,620; Profit from *subsidiary companies*, $131,867; Miscellaneous profits, $224,217; Preferred dividends, $335,754; Common dividends, $65,943; Reserve for income taxes, $261,149; Licenses, etc., written off, $233,975.

Arrange these items in the form of an income sheet setting forth the important balances.

19. The balance sheet items for the same company whose income sheet was stated in Problem 18, were as follows on June 30, 1923:

Plant properties and equipment, $3,820,877 (after deducting $3,378,625 for depreciation); Licenses, patents and goodwill, $2,145,568 (after writing off $1,403,853); Investments in subsidiary companies, $5,093,189; Cash, $746,413; Notes and Accounts receivable, $435,077; Securities owned, $1,963,956; Inventories, $1,309,037; Due from subsidiary companies, $319,535; Deferred charges, $300,772; Common stock, $6,594,300; Preferred stock, $5,595,900; Notes payable to subsidiary companies, $228,073; Notes and accounts payable, $890,203; Reserve for income taxes, $229,715; Reserve for contingencies, $950,000; Surplus, $1,496,352; Dividends payable, $149,881.

(a) Rearrange the material into a report form of balance sheet.

(b) Write a statement in narrative form giving the salient facts concerning the condition of the company on June 30, 1923, and the results of operations for the year as shown in the income sheet from Problem 18.

20. Select one problem from Chapter IX and one from Chapter X for which you have prepared working sheets. Rearrange the material into properly classified statements.

21. From the following trial balance and inventories prepare (a) a working sheet (or ten-column statement); (b) a classified income sheet and balance sheet.

Trial Balance December 31, 1924

Real Estate	$ 100,000	....
Buildings	258,000	....
Equipment	697,500	....
Goodwill	300,000	....
Common Stock	....	$1,000,000
Preferred Stock	....	500,000
Cash	31,474	....
Selling Expenses	20,600	....
Interest (Commercial)	3,300	....
Accounts Receivable	159,060	....
Raw Materials Inventory, January 1, 1924	94,567	....
Finished Goods Inventory, January 1	90,000	....
Factory Expenses, General	8,989	....
Labor (Factory)	577,000	....
Power	77,000	....
Salaries for Salesmen	47,000	....

Salaries, General Officers	25,000	....
General Office Expense	15,000	....
Purchases, Raw Materials	676,985	....
Bond Interest	2,000	....
Discount on Purchases	....	8,120
Accounts Payable	....	27,871
Reserve for Depreciation	....	38,272
Sales	....	1,402,391
Notes Payable	....	40,300
Bonds	....	100,000
Surplus	....	66,521
	$3,183,475	$3,183,475

The inventory of materials, December 31, 1924, was $255,000 and of finished goods $180,000. The uncollectible accounts are estimated at 2% of the accounts receivable. Depreciation is estimated at $20,000 on the factory, $5,000 on selling equipment and $3,000 on the office building and furniture. Accrued interest on the bonds amounts to $2,000. A quarterly dividend of 2% is declared on the preferred stock.

22. The following problem was taken from an examination for certified public accountant at a recent date. Except for two minor changes the problem is presented in its original form.

The Globe Manufacturing Company, of Ohio, was authorized to issue Common Stock to the amount of $500,000, divided into 5,000 shares. Of the authorized issue $250,000 has been issued, and this amount was outstanding on January 1, 1923.

The bonded debt, which was incurred prior to the current year, is represented by First Mortgage Bonds. Interest at 6% is payable May 1 and November 1 of each year. The total issue of such bonds amounted to $50,000, which was the amount of bonds outstanding on January 1, 1923.

The following data must be taken into consideration in addition to that contained in the trial balance given hereafter.

The inventories at December 31, 1923, were:

Raw Material	$86,000
Goods in Process	54,000
Finished Goods	38,500
Factory Tools	4,000
Patterns	3,500
Factory Supplies	2,195
Office, Stationery and Printing	700

Provision for Depreciation: Buildings 2% and Machinery 10%. Provide for doubtful accounts one-half percent of net sales.

To Be Charged Off

Uncollectible Accounts Receivable	$7,400
Patents, 6% of Cost ($25,000)	1,500
Office Furniture and Fixtures, 10%	570

Accruals

Taxes, City and State	$2,720[1]
Bond Interest	500
Wages, Direct Labor	6,500
Wages, Indirect Labor	1,200
Salesmen's Salaries and Commissions	2,149

Of the insurance, after deducting $760 prepaid, $500 is to be charged to Manufacturing, and $950 to General Expense.

The debit shown on the trial balance for Income Taxes was for additional assessments for prior years.

At the close of the current year the company declared a cash dividend of 10%, payable January 15, 1924.

You are required to submit:

(a) A balance sheet.

(b) A statement of operations for the current year, showing cost of manufacturing, cost of sales, and net profits for the year.

(c) Journal entries.

(d) Your work sheet.

THE GLOBE MANUFACTURING COMPANY

Pre-closing Trial Balance, December 31, 1923

Capital Stock	....	$ 250,000
Bonded Debt	....	50,000
Land	$ 25,000	....
Buildings	50,000	....
Machinery	40,000	....
Tools	7,000	....
Patents	19,000	....
Patterns	5,000	....
Cash	81,565	....
Accounts Receivable	244,197	....
Notes Receivable	6,500	....
Inventory, Materials, January 1	92,400	....
Raw Materials Purchased	433,600	....
Finished Goods on Hand, January 1	42,000	....

[1] One-half to manufacturing and one-half to General Expense.

Goods in Process, January 1	60,500	....
Direct Labor	233,500	....
Indirect Labor	61,200	....
Power	19,850	....
Factory Superintendence	6,500	....
Repairs to Machinery	1,310	....
Repairs to Buildings	940	....
Factory Supplies	6,150	....
Miscellaneous Factory Expense	860	....
Employers' Liability Insurance	4,000	....
Notes Payable	....	50,000
Accounts Payable	....	143,315
Insurance	2,210	....
Taxes, City and State	2,460	....
Income Taxes	850	....
Interest Paid, General	7,885	....
Bond Interest	2,500	....
Salaries of General Officers	15,000	....
Salaries of General Office Clerks	13,200	....
Office Furniture and Fixtures	5,700	....
Office Stationery and Printing	2,090	....
Miscellaneous Expenses, General Office	3,510	....
Sales	....	1,051,500
Returned Sales	29,500	....
Allowances on Sales	12,400	....
Freight In	23,000	....
Freight Out	10,803	....
Cartage and Express	3,750	....
Bonding of Office Employees	250	....
Salesmen's Salaries and Commissions	36,300	....
Traveling Expenses, Salesmen	15,300	....
Reserve for Depreciation	....	21,750
Reserve for Doubtful Accounts	....	13,250
Cash Discounts Allowed	5,000	....
Cash Discounts Received	....	4,000
Surplus, January 1	....	48,965
	$1,632,780	$1,632,780

XII. SPECIAL ACCOUNTS

1. Formerly, in bookkeeping, it was customary to use one account called Merchandise, in which were recorded all purchases and sales, purchases returns and sales returns, and, sometimes, all purchases discounts and sales discounts. Now, it is customary to use a separate account for each of these. What do you think of the relative advantages and disadvantages in these methods?

2. "As the Merchandise account is of a mixed character, being partly real and partly nominal, it is necessary to take steps to separate the one element from the other, in order that the nominal element may be used to determine the profit that has been made." Explain.

3. Why is it unnecessary to take an inventory of such assets as machinery and furniture and fixtures, when closing the books at the end of an accounting period? What other accounts may be handled in the same manner?

4. "Real accounts are those representing real values, either assets or liabilities, including the capital. Nominal or operating accounts are those which record the operating costs or profits of a business and do not represent values in themselves but do record the details of the costs and profits, the net balance of which records the profit or loss." Explain.

5. What importance should one attach to the division of accounts into real and nominal? What difference does it make if repairs, for example, are charged to a real or to a nominal account? What are mixed accounts? What are controlling accounts? What are adjusting accounts?

6. Why is it necessary to distinguish between capital and revenue expenditures?

Can you see any advantage in a careful classification of expenditures?

7. "We have no bonds outstanding on which interest must be paid. Most of our competitors do have bonds issued on which interest must be paid regularly. Our costs are therefore lower and we can sell at a lower price."

What do you think of this statement?

8. What data should be recorded in a Goods in Process account? In a Finished Goods account? In a Trading account?

9. "The accounts Materials, Goods in Process, and Finished Goods, however, which are used in factory accounting, can be considered as typical asset accounts; for in these cases cost prices and selling prices are not entered in the same account, and special accounts, such as Sales, are used to show gross revenue." Explain.

10. "If, then, the value of all materials taken from the storeroom is considered as a deduction from revenue it is necessary to offset this deduction with the Goods in Process and Finished Goods accounts."

What account should be credited in the above case? Do such credits represent revenue, or something else?

11. "In determining the value of goods in process or finished goods, therefore, the problems of cost accounting are involved." Explain and give examples.

12. A Merchandise account is "sometimes kept as a mixed account—that is, an account which presents the complication of combining specifically both asset and equity elements."

Explain and give examples.

13. What particular advantage is there in the use of a Merchandise Trading account? If a Merchandise Trading account were used, what should be done with such accounts as Purchase Discounts and Sales Discounts?

14. In considering merchandise inventories and merchandise expense and revenue, is it not true that there are changes in cost price, and that values decline as the business processes are carried on? If so, how are the accounts affected?

15. Who should control the inventory records of material? Should this record be under the control of a storekeeper, the accountant, a manager in control of purchasing, or of production, a treasurer, or a comptroller?

16. Of what particular value is a stores record other than a perpetual inventory? Explain and give examples.

17. "The purpose of the accounting records is to show what *has* happened, not what *might* have happened; therefore, all expenses incurred during a period should be charged to the cost of the goods produced during that period."

Explain and criticize.

18. "All interest and discounts are straight profit and loss items. Interest on bank loans are but payments on account of insufficient capital, and these payments are in the place of what otherwise would be stock dividends."

Explain and criticize.

19. Draw up an organization chart for a large manufacturing concern.

By the use of diagrams, show the accounting records that would be necessary in an establishment of this kind.

20. The following data are taken from the books of a wholesale and manufacturing concern on July 31, 1924:

Materials, July 1	$52,000
Materials Returns	400
Finished Goods, July 1	23,000
Purchases	56,000
Sales	63,000
Sales Discounts	860
Allowances on Materials	650
Purchases Discounts	1,000
Sales Returns	340
Freight In	1,200
Materials, July 31	60,000
Finished Goods, July 31	12,500

Make the necessary journal entries, open the accounts, post the entries, and close the accounts.

21. Name the various bases which may be used in the evaluation of inventory.

Would not the keeping of a perpetual inventory remove considerable of the loss incurred in the taking of annual or semi-annual inventories?

22. During December, a company purchased materials for $18,000, the freight charges upon which were $700. The discount on the materials was $200. Of the materials, $12,000 were put into the manufacturing process. There were labor charges of $5,000 and factory overhead charges of $400. Sales totaled $32,000. The inventory value of the goods in process at the end of the period was $4,000. This amount was made up of material cost, labor cost and factory overhead cost.

Using the accounts Labor, Freight, Materials, Discounts, Factory Overhead, Goods in Process, and Sales, make the journal entries, post, and close, finally, into a Manufacturing and Trading account.

23. The following inventories are found on the books of the Jones Company on August 31: Unpaid rent, $275; prepaid advertising, $145; interest on notes receivable, $150; interest on notes payable, $1,200; accrued wages, $620; unexpired insurance, $410.

Make the necessary journal entries.

24. On the books of a corporation, the following accounts appear:

Charter Fee	$ 25
Legal Expense	200
Promotion Charges	1,000

How should these expenses be classified?

How should items of this sort be handled in the accounts?

25. A corporation leases a building for twenty years. The following expenditures on the building are incurred:

New partitions	$ 500
Light fixtures	150
New windows	50
Repairs of roof	200

What records of this information should be kept on the books of the corporation?

26. "Entries should be made to adjust these classes of items in order that the actual income and expense and all assets and liabilities will be shown. These items are classified as follows:

A.—Items already entered in the nominal accounts, part or all of which affect the operation of future periods:

(1) Deferred charges to operations.
(2) Deferred credits to operations.

B.—Items not yet entered in the nominal accounts, but which affect the operations of the current period:

(3) Accrued expenses (or accrued accounts payable).
(4) Accrued earnings (or accrued accounts receivable)."

Comment in detail upon this quotation and give examples of each case.

27. A manufacturing account is used to determine the cost of manufacturing goods during a particular period.

The following debits, among others, may be found in this account:

Cost of Goods in Process, January 1
Freight In
Direct Labor
Depreciation on Machinery and Tools
Indirect Labor
Heat, Light and Power
Repairs on Machinery and Tools
Rent
Taxes
Factory Supplies, etc.

(a) Explain what each one of these accounts means.

(b) What should appear on the credit side of the Manufacturing account?

(c) Set up a Manufacturing account, use the above accounts, assuming amounts.

(d) Close the Manufacturing account.

28. The Machinery account of a corporation has a balance of $75,000. At the end of the first year an allowance of $5,000 was set up. Shortly after the books were opened for the ensuing period, $5,000 of the machinery was sold for $4,000.

Record the situation.

29. A corporation receives a note of $10,000 in payment of a bill of goods. The note is taken to the bank and discounted at 2%.

Ignoring interest, make entries on the corporate books recording the above.

The maker of the note pays the obligation at maturity. Journalize.

The maker of the note is unable to pay the note at maturity. The corporation has a Reserve for Bad Debts of $6,000. Journalize.

30. Purchases of the A. B. Company were $420,000. The charges for freight were $6,000, one-third of which should have been charged to the preceding period. Purchases returns and allowances were $12,000; sales for the period were $520,000. The merchandise inventory for the beginning of the period was $165,000, and at the end of the period, $175,000.

Make the entries necessary to record the situation. Use a Trading account to close, and close this account in turn.

31. The following accounts were taken from the books of the X.Y. corporation, a manufacturing and trading concern, on January 31, 1925:

Interest on Notes Receivable	$ 15
Materials, January 1	4,500
Purchases Discounts	300
Purchases	36,000
Purchases Returns	1,000
Sales Discounts	600
Sales	48,000
Sales Returns	2,000
Interest on Notes Payable	20
Freight In	15
Goods in Process, January 1	3,500
Materials, January 31	2,200
Labor	500
Overhead	50
Goods in Process, January 31	2,000

Close the accounts, making use of a Goods in Process account, a Manufacturing and Trading account, an Expense and Income account, and a Net Revenue account.

The corporation is undecided for the time being, as to what shall be done with the profits. Record. Later the directors declare dividends. Record. Later the dividends are paid. Record.

32. A mercantile organization had the following accounts to close at the end of an accounting period, August 31, 1925:

Merchandise Inventory, August 1	$ 12,000
Merchandise Inventory, August 31	15,000
Purchases	75,000
Sales	125,000
Purchases Returns	1,500
Sales Returns	10,000
Purchases Discounts	500
Sales Discounts	1,000
Freight In	100
Depreciation	2,000
Advertising	1,500
Interest on Notes Receivable	125
Commissions	500
Insurance	25
Office Salaries	5,000
Truck Repairs	20
Salesmen's Salaries	1,000
Accrued Wages	200
Postage	10
Gift to Red Cross	25
Interest Paid	75
Loss from Fire	2,000
Stationery	35

Open the necessary accounts and make the journal entries closing the proper accounts through Purchases and Sales. In the final closing, use Expense and Income, Net Revenue, and Surplus accounts.

XIII. PARTNERSHIP ACCOUNTS

1. If nothing is stated in the contracts of partnership respecting the share of the profits each partner shall receive, upon what basis should the profits be divided?

2. Upon what instrument is the partnership relationship based? What should it contain?

3. "In the corporation, there is limited liability. This is not true in the partnership."

Explain and give examples.

4. "The purchase and sale price of a share in proprietorship in the case of a partnership is little more likely to indicate the book value of the firm's assets than is the price of a share of stock in the case of a corporation likely to prove a reliable index at all times of the book value of the corporation's assets."

Explain and discuss.

5. "If nothing is said as to the division of profits in the articles, the law would give each partner an equal share. Profits may be divided in a number of different ways, among which are: In proportion to the amount of capital originally contributed or since accumulated by each, in proportion to the amount of capital and the time it has remained in the business, or in an agreed ratio that may be different from the capital ratio."

Discuss and give examples of each.

6. "If the division of profits is on the basis of the amount standing at the credit of each partner's capital account, there is no object in giving them interest on their capital."

The more frequent case is when a partner has put in more money than his share and is allowed interest on the excess, which is really a loan to the business.

Explain.

7. There are several ways of dividing the profits of a partnership:

"(1) On the basis of the capitals at the beginning of the year;

(2) On the basis of the capitals and of the time that they were left in the business (average capital);

(3) On any agreed basis provided for in the articles of partnership;

(4) On the basis of interest on capital for an agreed percent, then on an agreed basis;

(5) On the basis of salaries to all the partners, then on an agreed basis."

Explain and give examples of each case.

8. "The partnership balance sheet may be constructed from several points of view. From a managerial standpoint, only the business assets and liabilities need be considered. From the point of view of the creditors, however, there is something to be said in favor of a two-section statement, part of which should cover the affairs of the partnership as a business entity and part the outside financial interests of the individual partners."

Explain.

9. "Salaries are an expense of the business, and should be charged to a nominal account and cleared into profit and loss, thus decreasing the profit to be divided. On the other hand, drawings are in no sense an expense and do not decrease the total profits of the business." Explain.

10. Should interest be allowed upon drawings in the case of a partnership? What should be done to insure interest upon drawings?

11. "Realization means the conversion of assets into cash; liquidation means the payment of liabilities." Discuss.

12. The following two theories of partnership are supported:

(1) The entity theory, in which the partnership is a legal person distinct from the members of the firm.

(2) The aggregate theory, in which the partners are joint owners of the partnership property.

Explain, in detail, the main distinctions between these two forms. Which is followed in Europe? In England? In the United States?

13. There are many classifications of partners. Among them are mentioned, ostensible partners, nominal partners, dormant or silent partners, and secret partners.

Explain each kind of partner and indicate his rights and duties.

14. Partnerships may be dissolved in the following ways: (1) By the withdrawal of a partner; (2) sale of partnership interest; (3) admission of a new partner; (4) mutual consent of partners; (5) expiration of time limit; (6) illegality of object; (7) insanity, death, misconduct or bankruptcy of partner; (8) war between nations of which partners are citizens; (9) bankruptcy of partnership, and (10) sale or transfer.

Explain and give examples of each case.

15. The balance sheet of S. A. Wills, on December 31, 1924, is as follows:

Assets		*Liabilities*	
Cash	$1,400	Accounts Payable	$1,000
Accounts Receivable	1,600	Notes Payable	200
Notes Receivable	500	S. A. Wills	6,925
Merchandise Inventory	4,000		
Insurance	25		
Furniture and Fixtures	600		
	$8,125		$8,125

On the same date, the following was the balance sheet of M. N. Wells:

Assets		*Liabilities*	
Cash	$1,100	Accounts Payable	$1,500
Accounts Receivable	1,800	Notes Payable	500
Merchandise Inventory	5,000	M. N. Wells	6,700
Delivery Equipment	800		
	$8,700		$8,700

M. N. Wells agrees to furnish enough cash so that his interest will be equal to Wills' in the partnership they decide to form.

(a) Close the books of each single proprietor.

(b) Open the books of the partnership.

16. On January 1, 1925, the following were the balance sheet accounts of J. A. Jensen: Cash, $4,200; Office Supplies, $700; Notes Receivable, $500; Accounts Receivable, $5,000; Merchandise Inventory, $22,000; Office Equipment, $500; Building, $18,000. Accounts Payable were $14,000 and Notes Payable, $2,000. His Drawing account showed a debit balance of $500.

On February 1, 1925, the following was the condition of the accounts: Cash, $3,000; Office Supplies, $600; Notes Receivable, $500; Accounts Receivable, $10,000; Merchandise Inventory, $20,000; Office Equipment, $500; Building, $18,000. Accounts Payable were $12,000 and Notes Payable, $2,000. The Drawing Account showed a debit balance of $800.

What is the income for J. A. Jensen for the month of January?

What do you think of this method of determining income? Is it the best method?

17. X and Y invest $10,000 each in a partnership. During the first month of operation, X withdraws $500 and Y $200. The monthly income was $4,000. It was divided equally.

During the second month, X withdrew $1,000 and Y made no withdrawals. At the end of the second month, they decide to divide according to the investment at the beginning of that month. The income was $6,000.

During the third month, X withdraws another $1,000. Y withdraws $500. At the end of this month, the partners decide to share the $8,000 income according to their investments at that time.

Set up the accounts for each month and show how the information should appear in the accounts, ignoring the matter of interest.

18. Three men form a partnership. A puts in $15,000 in cash and B, $7,500. B is to devote all his time in making the venture a success. C invests nothing, but allows the partnership to use his name. Neither A nor C are to have an active part in the partnership activities.

During the first year, A is to receive 6% on his investment, C is to receive $5,000, and B is to receive the remainder of the earnings. $10,000 is earned. B and C are to leave their shares in the partnership.

The profits at the end of the second year are to be divided ac-

cording to the capital invested at the beginning of the year. The profits for the second year were $20,000.

Show how the accounts appear at the end of the first year. At the end of the second year.

19. X and Y, partners, decide to take a new partner, Z, into the organization. This is their balance sheet:

Assets		*Liabilities*	
Cash	$ 3,000	Notes Payable	$ 8,000
Notes Receivable	1,000	Accounts Payable	12,000
Accounts Receivable	12,000	X, Capital	18,000
Merchandise Inventory...	6,000	Y, Capital	18,000
Building	14,000		
Land	20,000		
	$56,000		$56,000

An accountant informs Z that a note receivable of $500 will never be collected, nor will $2,000 of accounts receivable. He states that there should be a reserve for depreciation on building of $2,000.

Z then agrees to invest sufficient cash to give him a one-third interest, after the balance sheet has been remade.

Construct a new balance sheet, showing the revisions and the new proprietorship interests.

20. At the end of 1924, two partners agreed to divide their profits on the basis of their capital and the length of time it remained in the business.

Lowell's account gives the following information: Jan. 1, paid in $12,000; Apr. 1, withdrew $1,000; July 1, paid in $3,000; Sept. 1, paid in $1,000; Nov. 1, withdrew $2,000.

Linden's account gives the following information: Jan. 1, paid in $8,000; March 1, paid in $2,000; July 1, withdrew $1,000; Oct. 1, paid in $3,000; Dec. 1, paid in $2,000.

The profits for the year were $10,000. Show how these profits were distributed.

21. X, Y, and Z have invested as follows in a partnership: X, $5,000; Y, $3,000; Z, $2,000. They had agreed to divide profits, X, 1/2; Y, 3/10; Z, 1/5.

The business was a failure, however, and the partnership was forced to dissolve. The deficit was $6,000. What was the loss of each partner?

22. Three partners, A, B, and C, agree to yearly salaries of $6,000, $5,000 and $4,000, respectively. After the salaries are paid, if the remaining profits be less than $30,000, A will receive six-fifteenths; B, one-third; and C, four-fifteenths. Remaining amounts above $30,000 are to be divided equally. The profits for the period were $50,000.

Set up the partnership accounts, make the necessary entries, and post.

23. On December 31, 1924, the balance sheet of Roberts and Norton, partners, appeared as follows:

Assets		*Liabilities*	
Cash	$ 200	Notes Payable	$10,000
Accounts Receivable	15,000	Mortgage Payable	20,000
Merchandise Inventory	16,000	R. A. Roberts, Capital	7,000
Plant and Equipment	8,000	B. E. Norton, Capital	6,000
R. A. Roberts, Personal	1,500		
B. E. Norton, Personal	2,300		
	$43,000		$43,000

The partnership is forced into bankruptcy. The business is taken over by creditors. They find that the accounts receivable are worth $12,000, the merchandise inventory, $14,000, and the plant and equipment, $6,000.

Give the entries necessary to close the books of the partnership. The partners share profits and losses equally.

24. The capital accounts of X and Y, two partners, show the following additions and withdrawals during the year:

X, Capital

May 1	$ 6,000	January 1	$15,000
November 1	3,000	April 1	9,000
		August 1	4,500
		September 15	6,000

Y, Capital

June 1	$ 3,000	January 1	$12,000
October 1	6,000	March 15	6,000
December 15	6,000	August 1	9,000

In reckoning, use a month of thirty days. The profits for the year were $15,000. X and Y have agreed to divide their profits according to the amount of capital invested and the length of time it remained in the business. How much of the profits does each partner receive?

25. Three partners, A, B, and C, are engaged in business. A contributed $20,000; B, $10,000; and C, nothing at all. C is to receive $5,000 salary per year.

The partners are to receive 6% per year on their capital invested. After the obligations to the three partners have been met, the profits are to be divided in the ratio of 10, 5, and 1. The profits at the end of the first year of operations were $20,000.

Make the entries, set up the accounts, and post.

26. A, B, and C, partners, contribute respectively $50,000, $70,000 and $80,000. They agree to divide their profits according to their original investments. Their profits for the first year are $65,000. What amount does each partner get?

27. Jones and Brown, partners, start business on January 1, the former investing $40,000 and the latter $30,000. They are to receive interest of 10% per annum on their investment. The profits for the first year of operation are $12,000.

They agree to share the profits equally. At the end of the first year Jones withdraws $4,000 and Brown withdraws $2,000.

The profits at the end of the second year are $15,000. Jones withdraws $4,500 and Brown $2,500.

At the end of the second year White is admitted to the partnership, and he puts into the business the same amount of cash as Jones had at that time. The agreements respecting interest and profits remain the same.

The profits at the end of the third year were $18,000. Jones withdrew $3,000, Brown $1,500, and White $1,000.

Show the capital accounts for each of the partners for each of the years.

28. D. A. Duffy and C. E. Clark decide to start a garage business at 1220 Vine Street. Duffy is in a position to invest $7,000, but Clark can invest only $5,000. They agree that each should receive a salary of $150 per month.

Draw up a partnership agreement placing therein all of the salient features.

29. A partnership agreement provided that the two partners shall distribute profits according to their investments. A invested $10,000 and B, $8,000. Each partner may withdraw a

monthly salary of $150. During the year, A withdrew $1,800 and B $1,600. The yearly profits were $5,000.

Make the necessary entries, set up the accounts, and post.

30. The partnership of James, Jenkins and Johnson showed the following balance sheet on December 31, 1924:

Assets		*Liabilities*	
Cash	$ 4,000	Accounts Payable	$ 4,000
Accounts Receivable	6,000	Notes Payable	2,000
Notes Receivable	500	James, Capital	9,000
Merchandise Inventory	10,000	Jenkins, Capital	4,500
Furniture and Fixtures	1,500	Johnson, Capital	4,500
Delivery Equipment	2,000		
	$24,000		$24,000

(a) James withdrew from the business. He was given $2,000 in cash and a note for $7,000. Reconstruct the balance sheet.

(b) Jenkins and Johnson then decide to close the business. They get $4,000 for accounts receivable, $500 for notes receivable, $8,000 for merchandise, and the amounts indicated for the fixed assets. They meet all their liabilities.

Reconstruct the sheet and close out the partnership.

XIV. CORPORATION ACCOUNTS

1. "In the early history of the development of the corporate form of organization, special action by the state legislature was required for the formation of each corporation."

Why was this necessary? Would such an arrangement be feasible at the present time?

2. In what respects does corporate proprietorship differ from partnership proprietorship? Point out the legal and accounting aspects of corporate and partnership prorietorship.

3. In a celebrated legal decision, the corporation was defined thus: A corporation is "an artificial being, invisible, intangible, and existing only in contemplation of the law."

Explain the meaning of this quotation.

Does this quotation offer an explanation for accountants showing corporate accounts with credit balances?

4. "The individual stockholder has no title whatever to specific assets. He simply has a practical interest in the asset *total*. The important concept for the accountant in this situation is that of a residual equity. Such an equity is the common stockholder's."

Explain and give examples showing what the writer meant in the above statement.

5. It is often stated that the development of business organization has been from the single proprietorship to the partnership, to the corporation. Do not corporations sometimes change from the corporate form to the partnership? Do you know of any regulation, at the present time, that would encourage corporations to make such a change?

6. Explain the nature of the following accounts: Capital stock, capital stock authorized, capital stock issued, capital stock outstanding, capital stock discounted, treasury stock, capital stock donated, capital surplus, and surplus.

7. "The corporation acts as does a sole proprietorship or partnership, except when it is subject to the regulations imposed on it because of the nature of its legal entity."

What regulations are imposed upon a corporation because of its legal entity?

8. What purpose do the following corporate records serve: Minute book, subscription book, subscribers' ledger, stock certificate book, stockholders' ledger, and stock transfer book?

9. "Ownership or proprietorship of each stockholder is indicated not by the par value or any other value of the shares held, but by the number of shares held."

What is meant by this statement? Has it any reference to no par value stock?

10. Dividends may be paid in various forms; assume that a corporation has a Net Revenue account of $50,000. Make the entries showing dividends paid in cash, accounts receivable, automobiles, typewriters, acres of land, and capital stock.

11. "The juggling of depreciation charges, or other improper accounting policies cannot be justified even if its purpose is to iron out the fluctuations in net revenue so that a stable dividend rate may be established."

What advantages are there in a stable dividend rate? Is a corporation ever justified in borrowing to maintain a stable dividend rate? Would the use of an Undivided Profits account help the situation?

12. What line of reasoning did the United States Supreme Court follow in deciding that stock dividends do not constitute taxable income? Was this a wise decision? How does such a decision serve a corporation? Its stockholders? Would not a stockholder have to pay a tax on the income he received when he disposed of his "stock dividend" stock?

13. In closing the books of a partnership upon dissolution, in what order should the claims of creditors be satisfied?

14. The following are mentioned as advantages of incorporating: Limited liability, continuous life, availability of shares, legal entity, larger capital, ease in management, etc.

The following have been mentioned as disadvantages in incorporating: Restrictions upon capital, freedom of action, character of the business, investments, necessity for taxes and reports, etc.

Give an example of each case, showing how the particular case is an advantage or disadvantage in incorporating.

15. Suppose capital stock is issued without par value. What entries should be made? Should discount on stock be shown?

16. Define and explain the following: Cumulative preferred stock, participating stock, guaranteed stock, founders stock, debenture stock, watered stock, and treasury stock.

17. What do you understand by the following: Face value, book value, real value, and market value?

18. "Of course by means of special contracts or by-laws some of the features of a partnership may be engrafted on a corporation, and to a limited extent the converse is true.

Explain and give examples.

19. "The stockholder is not the owner; he has merely an equity. The same can be said of the other investors. The managerial view, the conception of the corporation as a legal and economic entity operating a mass of properties in the interest of a whole body of investors of various classes, is the proper starting point."

Explain.

20. Finlay and Sullivan, partners in a mercantile concern, contemplate changing their organization into a corporation.

Write a letter to the partners setting forth:

(1) Special problems to consider in corporate organization.
(2) The advantages and disadvantages of a partnership.
(3) The advantages and disadvantages of a corporation.
(4) Your recommendations.

21. A corporation, recently organized, plans to issue 700 shares of common stock and 300 shares of preferred stock. The par value of the stock is $50. Five individuals, A. B. White, C. D. Brown, E. F. Block, G. E. Green, and H. A. Arnold subscribe

and pay for the following amounts: White, Brown, and Block each take 100 of the common and 50 of the preferred; Green takes 100 of the common and 100 of the preferred; Arnold takes 100 of the common and 50 of the preferred.

Make the journal entries necessary to record the above information.

22. Jay Sherwood, who has been conducting a retail shoe business, decides to organize a corporation called the Sherwood Shoe Company. One hundred shares of capital stock are to be issued with a par value of $50 per share. The following persons purchase, and pay cash for their shares: C. A. Bemis, 15 shares; D. E. Bond, 20 shares; M. R. Crane, 25 shares; and R. O. Ennis, 10 shares. The balance sheet of the single proprietorship shows that Sherwood's capital was $1,000. It is agreed that Sherwood will receive the remaining 30 shares for that amount.

Record the information on the books of the corporation.

23. The Allison Manufacturing Company organized with capital stock of $500,000, of which $300,000 was common and $200,000 cumulative preferred. One-half of the common and one-half of the preferred were sold, but the subscribers had paid, on the date of organization, only one-half of their subscriptions.

Make the journal entries and post to the accounts.

24. A corporation has capital stock of $500,000 outstanding. A stockholder makes a gift of $25,000 of this to the corporation. Record.

The directors of the corporation decide to buy $25,000 of the remaining $475,000 capital stock outstanding. However, they are not able to secure this stock at par; as a matter of fact they are compelled to pay $30,000 for it. Record.

25. A corporation which has paid dividends for 25 years desires to continue doing so.

During 1923, it made profits of $150,000. The directors declared dividends of $100,000, and shortly thereafter paid them. The remainder was placed in an Undivided Profits account.

At the end of 1924, the profits were $100,000, half of which the

directors decide to place into Surplus. The directors want to declare the same dividends for 1924 as for 1923.

What might the directors do in order to pay dividends of $100,000 for 1924?

Record each step throughout the whole process.

26. The capital stock of the X company consists of 1,000 shares with a par value of $100. Half of these shares are cumulative preferred; the remainder common. The former bore a dividend rate of 6%. During 1923, the income of the corporation was not sufficient to pay any dividends.

At the end of 1924, the amount available for dividends was $14,000.

What was the distribution of dividends at the end of 1924?

27. Landon and Lindsey, partners, decide to incorporate under the name of the Landon-Lindsey Company. The partnership balance sheet on December 31, 1924, was as follows:

LANDON AND LINDSEY

Balance Sheet, December 31, 1924

Assets		*Liabilities*	
Cash	$ 2,000	Accounts Payable	$ 5,000
Accounts Receivable	10,000	Notes Payable	6,000
Notes Receivable	4,000	Accrued Items	3,000
Merchandise Inventory	28,000	Bonds Payable	6,000
Deferred Charges	2,000	Mortgage Payable	20,000
Bonds	3,000	*Proprietorship*	
Furniture and Fixtures	8,000	M. A. Landon	25,000
Delivery Equipment	3,000	T. R. Lindsey	25,000
Buildings	10,000		
Land	20,000		
	$90,000		$90,000

P. T. Laflin invests $15,000 of merchandise in the corporation, and pays cash of $10,000. Other subscribers take stock to the amount of $25,000 and pay cash. In this way, all of the stock is subscribed.

(a) Close the books of Landon and Lindsey.
(b) Open the books of the Landon-Lindsey Company.
(c) Make the balance sheet for the corporation.

28. A corporation, having a surplus of $25,000, decides to pay a dividend with merchandise.

Merchandise inventory having a cost value of $100,000 and a selling value of $150,000 is distributed to the stockholders.

Record.

29. The balance sheet of Schlossen and Mitchell, partners, on December 31, 1924, was as follows:

Assets		*Liabilities*	
Cash	$ 4,000	Accounts Payable	$ 4,000
Accounts Receivable	10,000	Notes Payable	50,000
Merchandise Inventory..	30,000	Schlossen, Capital	43,000
Building	96,000	Mitchell, Capital	43,000
	$140,000		$140,000

The partnership is being transformed into a corporation. The corporation assumes the notes payable but not the accounts payable. The building is taken over at a value of $110,000. Goodwill amounts to $36,000. The partners are to receive corporate interest, half of stock and half of bonds.

(a) Close the books of the partnership.
(b) Open the books of the corporation.
(c) Make a balance sheet for the corporation.

30. The balance sheet of a partnership is as follows:

Assets		*Liabilities*	
Cash	$ 2,000	Notes Payable	$ 1,000
Accounts Receivable	6,000	Accounts Payable	3,000
Merchandise Inventory ..	15,000	Mortgage Payable	2,000
Furniture and Fixtures...	2,000	Wilkins, Capital	10,000
Delivery Equipment	1,000	Jenkins, Capital	10,000
	$26,000		$26,000

One of the partners, Wilkins, withdraws from the organization. Jenkins decides to carry on the business as a single proprietor.

(a) Close the books of the partnership.
(b) Open the books of the single proprietorship.

31. The balance sheet of X and Y, partners, on December 31, 1924, was as follows:

Assets		*Liabilities*	
Cash	$ 10,000	Accounts Payable	$ 8,000
Merchandise Inventory	20,000	Notes Payable	4,000
Notes Receivable	8,000	Undivided Profits	4,000
Accounts Receivable	40,000	X, Capital	63,500
Building	50,000	Y, Capital	63,500
X, Drawings	10,000		
Y, Drawings	5,000		
	$143,000		$143,000

The partners decide to form a corporation with capital stock of $150,000. The corporation takes over the assets of the company, giving the partners in return capital stock of $100,000, and cash of $35,000.

Z subscribes to $40,000 of the capital stock and gives in cash $30,000 in payment, and the remainder in merchandise inventory.

(a) Close the books of the partnership.
(b) Open the books of the corporation.

32. A partnership is desirous of raising funds for expansion. They decide to organize a corporation in order to secure the necessary financial assistance. As a basis for transfer, the bookkeeper prepares the following balance sheet:

Assets		*Liabilities*	
Cash	$ 6,000	Accounts Payable	$ 8,000
Accounts Receivable	12,000	Notes Payable	4,000
Notes Receivable	2,000	Accrued Items	2,000
Merchandise Inventory	20,000	B. A. Simpson	33,000
Furniture and Fixtures	3,000	R. A. Simpson	33,000
Delivery Equipment	2,000		
Building	10,000		
Land	25,000		
	$80,000		$80,000

The corporation agrees to take over all the liabilities except notes payable. All of the assets except cash are taken over.

The corporation is to issue capital stock of $100,000. Each partner gets $40,000 of this in return for his partnership interest.

(a) Close the books of the partnership.
(b) Open the books of the corporation.

33. The Expense and Income account of a corporation, at the end of an accounting period, shows a credit balance of $6,000. The concern owes fixed charges of $8,200. Total liabilities are $330,000.

Make entries showing the payment of all fixed charges. Determine the total assets and set up a balance sheet.

34. A corporation's balance sheet appears as follows:

Assets		*Liabilities*	
Assets	$500,000	Bonds Payable	$ 70,000
Discount on Stock	60,000	Surplus	90,000
		Capital Stock	400,000
	$560,000		$560,000

What kind of account is Discount on Stock? Is it an asset? Is it a deferred charge? Is it a deficit?

35. A corporation has authorized capital stock of $2,000,000, one-half of which has been issued. It has $1,000,000 of preferred stock, all of which has been issued. The surplus is $2,000,000.

(a) What is the proprietorship? What is the common stockholders' equity? The preferred stockholders' equity?

(b) Stock dividends of $1,000,000 are issued. Record.

(c) The stockholders decide to reduce the amount of preferred stock by half. This amount is purchased at $98. Record.

36. The following comparative data were taken from the books of a corporation on the dates indicated.

	1924	*1923*
1. Allowance for Depreciation	$125,000	$100,000
2. Allowance for Taxes	50,000	65,000
3. Allowance for Bad Debts	5,000	6,000
4. Allowance for Maintenance	8,000	5,000
5. Allowance for Extensions	50,000	45,000
6. Allowance for Depletions	10,000	8,000
7. Allowance for Obsolescence	5,000	4,000
8. Allowance for Inventory Loss	20,000	15,000
9. Allowance for Sinking Fund	30,000	25,000

Make journal entries and explain the origin and meaning of each account.

XV. INTEREST PROBLEMS

1. "Interest enters into all transactions in which time is an important element." Explain what is meant by this statement.

2. Frequently advertisements appear in which goods are offered for sale on the installment plan. A small payment down binds the bargain and the balance of the sales price is paid in periodic installments over a period of time "without interest." The last two words are played up as an important part to be considered by the prospective purchaser. Is it true that interest is not involved in these transactions? Why is it that the expression "without interest" is emphasized in such advertisements?

3. "The accountant is concerned for the most part with *explicit* interest transactions, but there are a number of cases in which *implicit* interest must also be considered in the accounting records."

Explain what is meant by the terms "explicit" and "implicit" as used in this quotation. Give an illustration of each.

4. The X company offers to pay $75,000 for a patent right. The right to use the patent will enable the X company to earn $10,000 per year for ten years above the amount which could be earned without it. Explain how interest was involved in arriving at the price offered. If interest had not been involved, what would the X company have offered?

5. What is the distinction between commercial interest and bond interest?

6. Commercial interest is usually considered as an expense and bond interest as a deduction from net revenue. Why is this distinction made? Is it a logical distinction?

7. Frequently payments and receipts of interest on notes payable and notes receivable respectively, are entered in the one account. What is the significance of the balance of such an account? Is it good practice to include unlike items in an account?

8. What is the distinction between the *rate of interest* and the *rate of discount?* Explain the process by which commercial paper is *discounted* at a given rate of interest.

9. What is meant by the bond rate of interest as distinguished from the effective rate? If the effective rate were higher than the bond rate would a bond sell above or below par? If the effective rate were less than the bond rate? If the two were the same?

10. Explain what is meant by the terms *amortization* and *accumulation* in connection with bond issues.

11. "A bond is made up of two distinct promises to pay." What are the two parts and why is it convenient to view the bond contract in this way?

12. Explain how the value of a bond can be determined from ordinary interest tables. (a) Assume that the only tables available are for the accumulation of a sum at various rates of interest. (b) Assume that tables of present value of sums due and present values of annuities at various rates of interest are available.

13. "The problems of amortization and accumulation are of more importance in recording security transactions on the books of the issuing company than on the books of the investor in the securities." Explain why this is true. What factor is of more importance to the investor?

14. On September 10, 1924, the Cole company received a $1,000, 6% 60-day note from the Brown company to apply on the latter's account for the face of the note. On September 15, the Cole company discounts the note at the First National Bank. The bank discounted the note on a 6% basis. The Brown company paid the note in full with interest at the bank on October 9. Give entries covering all transactions mentioned above on the

books of (a) The Cole company, (b) The Brown company, (c) The First National Bank.

15. On June 1, 1924, the Audio Manufacturing Company issued $100,000 (par value) of 6% 10-year bonds, interest payable semi-annually. These bonds were purchased by a firm of investment bankers for $107,795. The yield at this price was 5%.

(a) Give the entries on the books of the Audio Manufacturing Company to record the issue of the bonds and for the interest payments made on December 1, 1924, and June 1, 1925.

(b) Give the entries on the books of the investment bankers on the same dates as in (a) assuming that all bonds were retained in their possession.

16. Assume that the bonds mentioned in Problem 2 had been issued at a price of $92,894 instead of $107,795. Answer the same questions assuming all other conditions to be the same. This price gives a yield of 7%.

17. Prepare tables showing the amortization of premium and the accumulation of discount respectively for the bond issues described in Problems 15 and 16.

18. If the sum of $200 were placed in a sinking fund at the end of each six months' period for 10 years and the trustee agrees to allow 4% interest compounded semi-annually, how much would the fund accumulate to? Show how you obtain the result.

19. If the sum of $100 were deposited in an account at a building and loan association at the end of each month and the association allows interest at the rate of 5% convertible semi-annually, how much would be on deposit at the end of eight years?

20. What would be the present value of a ten-year annuity of $6,000 payable in monthly installments if interest is computed at 6% convertible semi-annually?

21. The Antenna Radio Company issued $100,000 of 20-year 6% bonds. The bond contract requires the company to place in the hands of a trustee at the end of each year an amount

which, with interest at 5% convertible semi-annually, will accumulate to the par of the bonds at maturity. What is the amount of the annual contributions to the fund?

22. The Robert Investment Company has been requested to invest a sum of $50,000 in an annuity to run for 10 years. If interest can be computed at 5% convertible semi-annually, what will be the amount of the annuity payments? Assume (a) that payments will be made semi-annually, and (b) that payments will be made annually.

23. The Smith Realty Company purchased a leasehold that produces a net rental of $4,000 for ten years. The purchase was made on a 6% basis, interest convertible semi-annually.

(a) What was the purchase price?

(b) Prepare a table showing the distribution of each payment between interest and the return of capital.

24. The Finney Manufacturing Company issued $1,000,000 par of 6%, 5-year bonds, interest payable semi-annually, on April 1, 1925. The bonds were issued on a 7% basis, interest convertible semi-annually.

(a) At what price were the bonds issued?

(b) Prepare a table showing the accumulation of discount.

25. Suppose that the bonds mentioned in the preceding problem had been issued at a rate to yield 5%. Prepare a table showing the amortization of premium.

26. The Avondale Pen Company issued $100,000 of 4% 20-year bonds at a price to yield 6%, interest payable and convertible semi-annually.

(a) Give the journal entries on the corporation's books on the date of issue.

(b) Give the entries on the first two interest payment dates.

27. The bonds mentioned in the preceding problem were dated April 1, 1925, but were sold in blocks on the following dates: $15,000 on April 1; $30,000 on May 1; $50,000 on June 1, and $5,000 on July 1.

(a) Give the journal entries covering the sale of each block.

(b) Give the entries for the payment of the bond interest on October 1, 1925.

(c) Give the entries for the accrued interest on December 31, 1925, at the time the books are closed.

28. The Cole Mining Company issued $1,000,000 of 5%, 10-year bonds on May 1, 1925, and received $925,613. The bookkeeper made the following entries:

Cash	$925,613	....
Bonds	....	$925,613

At the first interest payment date the following entries were made:

Interest	$25,000	......
Cash	......	$25,000

(a) Criticize the bookkeeper's actions in the two instances.

(b) If the same entries had been made at each interest payment date throughout the life of the bonds, what entries would have been necessary at the end of the ten years when the bonds were paid?

(c) Give the correct entries for the issue of the bonds and for the first interest payment date.

29. Suppose that the bookkeeper (preceding problem) had made the following entries at the date of issue of the bonds:

Cash	$925,613	....
Surplus	74,387	....
Bonds	....	$1,000,000

Would this have been better accounting practice than the entries in the original illustration? Explain the full significance of these entries.

30. The Bliss Electric Company offers $1,000,000 of 10-year 7% bonds, interest payable semi-annually. The Bond Investment Company purchases the bonds on a 6% basis, interest convertible semi-annually.

(a) Give the journal entries on the books of the Bliss Electric Company at the date of issue and at the date of the first two interest payment dates.

(b) Explain the effect of your entries upon the annual income statement and balance sheet.

(c) Give entries at the date of maturity of the bonds.

31. Referring to the preceding problem, suppose that the following entries had been made at the date of issue:

Cash	$1,074,388	....
Bonds	....	$1,000,000
Profit on Sale of Bonds...	....	74,388

and that at each interest payment date the following entries were made:

Interest on Bonds	$35,000	......
Cash	......	$35,000

(a) Explain the fundamental error involved. What effect would these entries have on the income statements and the balance sheets?

(b) Do you consider this practice any less objectionable than that of charging discount on bonds to surplus?

32. It is considered entirely proper to capitalize the brokerage fee and other expense involved in issuing bonds. Thus if bonds of a par value of $100,000 are issued at par, a charge of 2% or $2,000 for commission, legal expense and costs of engraving, the bonds would be considered a very reasonable "issue cost." In this case the company would receive $98,000 net on $100,000 par value of bonds issued.

How would you advise a company to treat the $2,000 in the accounts? If it is not a discount but a capital charge, should it be amortized? If it should be amortized, what should be the basis of the annual charges against income?

33. In the published statements of insurance companies, the investments are usually listed with two valuations given. One is headed "book value" and the other "market value." What is the distinction between these two? Explain how the two valuations are obtained and the purpose of each.

XVI. VALUATION OF CURRENT ASSETS

1. What should be included in the account called *Accounts Receivable?* Should claims against employees be placed in this account?

2. How can the accountant determine what percent should be set aside for an Allowance for Bad Debts? Should the allowance be a percentage of Accounts Receivable or of Sales? Does it make any difference which is used as a basis?

3. How can it be determined whether or not a debt has become absolutely worthless? At what time may the debt be charged off?

4. What are trade acceptances? Is a trade acceptance a current asset? If so, in what account should it be placed?

5. "The problem of valuing goods in process is essentially the problem of cost allocation." Is this true or untrue? Explain.

6. What is a perpetual inventory? What are the advantages and disadvantages of a perpetual inventory?

7. "In the case of goods in stock which have been purchased at various prices, no cost method of determining inventory, whether weighted averages are used or not, would be consistent with the law of single price."

Explain and give illustrations showing whether or not this quotation be correct.

8. There are two general methods of handling the petty cash. Name the two methods and explain how cash is handled in each case.

9. Trace the historical growth of the use of negotiable instruments. Negotiable instruments were not used until there was need for them. What historical conditions of an economic nature gave rise to the use of negotiable instruments?

10. Set up a model form of stores ledger. Show how such a ledger should be administered. Of what value is such a record in inventory valuation?

11. "Manufacturers who indulge in the practice of inventorying raw material at the market price when that is greater than the actual cost, claim that the advance in price is a legitimate profit of the year in which it occurred."

Criticize this practice.

12. The balance sheet of a corporation contains, among others, the following accounts: Allowance for Bad Debts, Allowance for Inventory Loss, Allowance for Bad Notes, Allowance for Cash Depletion.

Explain the nature of these accounts.

13. List in detail the various current assets of a balance sheet, and state, in each case, the valuation that should be placed upon them.

14. A corporation makes a sale for $5,000 and takes a note for the full amount. Rather than wait a year for the cash, the concern takes the note to a bank and has it discounted. The discount is $200.

(a) Record the above.

(b) Suppose a balance sheet is made at this time. How would the above data appear on that report?

(c) Record the situation when the maker pays the note.

(d) Suppose the maker is bankrupt and therefore unable to meet the note at maturity. The corporation has an Allowance for Bad Debts account of $4,000. Record.

15. "The recognition in explicit entries of the appreciation of either current or fixed assets should always be avoided. Such appreciation in the nature of the case will be based upon estimate or guess, and accounting should deal with certainties, not estimates."

Show that the accountant makes estimates other than those having to do with appreciation.

Are accounting data as certain as the above quotation indicates?

16. "In deciding upon a basis for valuation various circumstances should influence the accountant's decision. Hard and fast rules must not be blindly applied in all cases. The nature of the enterprise, the purpose to be served by the accounts, the kind of property involved in any case,—these and other factors must be taken into account if rational conclusions are to be reached."

Show that this quotation is correct.

17. What valuation should be placed upon the following assets: Accounts receivable, cash, tennis equipment in November, a radio outfit which has become obsolete, a reaper which has stood unused in an orchard for three years, notes receivable, and an automobile which has just been manufactured.

18. How is it possible to determine whether or not a charge should be made to the asset or to expense?

19. Suppose an asset is sold at book value, for more than the book value, for less than the book value. What entry should be made to record each case?

20. In determining the net income, for income tax purposes, the law allows "a reasonable allowance for the exhaustion and wear and tear of property used in a trade or business, including a reasonable allowance for obsolescence."

How can a reasonable allowance be determined?

21. "There are three elements that enter into the cost of goods in process and of finished product; the material that has entered into them, the labor that has been expended on them, and the overhead or manufacturing expense."

How is the amount of overhead that is chargeable to each product determined?

22. The inventory of the Z corporation on June 30, 1924, was $24,000. The concern had built up an Allowance for Fire Loss,

amounting to $8,000. A fire occurred on the night of June 30. One-third of the inventory was completely destroyed. One-third was damaged to such an extent that it was possible to sell it at $3,000. The undamaged goods sold for $6,000. The inventory was insured for $5,000.

Make the entries necessary to close out the Inventory account.

23. The income tax provides that inventories may be valued at cost, or cost or market, whichever is the lower.

"Cost means:

1. In the case of merchandise purchased, the invoice price less trade or other discounts, except strictly cash discounts approximating a fair interest rate, which may be deducted or not at the option of the taxpayer, provided a consistent course is followed. To this net invoice price should be added transportation or other necessary charges incurred in acquiring possession of the goods.

2. In the case of merchandise produced by the taxpayer, (a) the cost of raw materials and supplies entering into or consumed in connection with the product, (b) expenditures for direct labor, (c) indirect expenses incident to and necessary for the production of the particular article, including in such indirect expenses a reasonable proportion of management expenses, but not including any cost of selling or return on capital whether by way of interest or profit.

Market means:

"The current bid price prevailing at the date of the inventory for the particular merchandise in the volume in which ordinarily purchased by the taxpayer, and is applicable in the cases (a) of goods purchased and on hand, and (b) of basis elements of cost (materials, labor and burden) in goods in process of manufacture and in finished goods on hand; exclusive, however, of goods on hand or in process of manufacture for delivery upon firm sales contracts at fixed prices entered into before the date of the inventory, which goods must be inventoried at cost."

Explain and give examples.

24. "The practice of carrying due-bills in the cash is a vicious one and should always be condemned by the auditor."

What are due bills? Why is the above practice a vicious one? How should due bills be handled?

25. It is contended by some administrators that there is no necessity for allowing for depreciation of such items as plant and machinery, if such assets are kept in an efficient condition. Are they right in their contention?

26. Many writers contend that a note receivable occupies a better position than does an account receivable.
Justify their attitude.

27. "The manager should always assure himself that the value of the goods as shown by the inventory is their *actual value at that time.*"
How is the manager to determine *actual value at that time?*

28. A dealer buys 500 bolts of cloth at an invoice price of $5.00 per bolt. The freight charges are $200, and it costs $100 additional to get the goods on the shelves for sale. Two hundred bolts are sold.
Figure the inventory for the end of the period on a cost basis.

29. What do you think of the regulation which permits farmers to inventory unsold produce at market price less estimated marketing cost? Might not the same regulation be extended to other extractive industries?

30. During the first year of operations, a company bought $70,000 worth of merchandise, sold $80,000 and paid for labor $32,000. $12,000 of materials remained in the store room at the end of the period. Labor charges on goods sold were $26,000. The material cost of goods sold was $42,000.
Assuming that all finished stock was sold, what is the inventory of goods in process?

31. In a manufacturing concern, a manager is placed in control of all the company's assets. How should he exercise control over current assets?

XVII. THE VALUATION OF INTANGIBLE ASSETS

1. What do you understand by the term "intangible assets"? What are the principal types of intangibles? What circumstances give rise to valuable intangibles?

2. Under what conditions should goodwill be carried as an asset in the accounts? Is goodwill a fixed or current asset? Is it a salable asset?

3. Under what circumstances, if any, is it proper to increase or decrease the book value of goodwill? Does goodwill depreciate the same as tangible assets?

4. A corporation purchased an established business in 1915 paying $100,000 for the goodwill in addition to other assets. The business proved profitable and a surplus of $200,000 was accumulated by 1920. The directors authorized the accountant to charge off the entire item of goodwill against Surplus. What effect will this have on the balance sheet statement?

5. Is there any reason why the goodwill carried as an asset on the books of a prosperous and growing manufacturing concern should be amortized or written off the books? Would your answer be different if the company was not prosperous or was not making substantial profits?

6. On what basis should goodwill be valued?

7. A retail merchant decided that his profits were large enough to warrant a goodwill value of $20,000. He authorized his bookkeeper to enter this amount on the books crediting Surplus. What effect did this action have on the status of his business as represented by his balance sheet?

8. Is there any purpose served in entering a charge for goodwill on the books when the same has been created by the owners?

9. Show how goodwill can be recognized and paid for in the acquisition of a business without carrying a goodwill item on the books.

10. Under what conditions is a patent regarded as an asset? What is the basis upon which patents are valued?

11. A manufacturing company maintains a research and experimental department in which improved methods are developed which are patented. Explain how you would treat the cost of operating such a department in the statements.

12. A certain manufacturing company obtained a patent on a process developed in its own shops. A conservative estimate of the value of the patent based upon savings attained was $100,000. The board of directors ordered this amount capitalized under the title of patents and used the surplus thus created to declare a stock dividend. Criticize.

13. Although there is some difference of opinion among accountants as to the propriety of recognizing appreciation of fixed tangible assets in the accounts, they are practically all agreed upon the principle that appreciation of *intangibles* should *not* be entered on the books. Explain carefully why the intangibles should be treated differently from the tangibles.

14. A number of the well-known large corporations call attention to the fact that no valuation has been placed upon its intangibles by placing an item in the asset side something like this:

Goodwill, patent rights, etc. $1.00

In most of these cases it is well known that the concern enjoys a well established reputation which gives a considerable value to its intangibles.

Explain why a company should not capitalize its goodwill and further why it takes particular pains to inform the public that it has not done so.

15. In the published balance sheet of a company you find the following item:

Plant, goodwill, patents, etc. $5,000,000

Do you see anything to criticize? Explain.

16. A company about to market a new product spends a large part of its capital in an advertising campaign. If successful, the results of such advertising are evident in increased sales and greater profits for a considerable period after the expenditures have been made. The advertising is said to "create goodwill." Should this fact be recognized in the accounts? How would you treat such advertising costs?

17. How may the value of a franchise for a street railway company be determined? Should it be carried on the balance sheet? Is the franchise value a factor in determining a reasonable rate?

18. The term "going value" is used in discussions pertaining to rates of charge for public utilities. Explain what is meant by going value and how it should be handled in the accounts. Is there a similar type of intangible in the case of competitive business enterprises?

19. An oil company has secured rights on a property which it is estimated can be worked for twenty years, and will yield during that period an annual income of $200,000. At 8% what value may be attached to the rights?

20. Suppose that the company mentioned in the preceding question purchases certain transportation rights which result in lowering costs to such an extent that the return is increased to $300,000 per year, and that these additional rights cost but $15,000. At what figure should these be carried in the asset accounts?

21. The valuation of intangibles, particularly goodwill, arises under the following circumstances:

(1) Upon the purchase of an enterprise by another concern. (2) In case of merger of several concerns. (3) Upon the admission of a new partner to a partnership. (4) Upon the dissolution of a partnership due to the retirement of one partner. (5) Upon the incorporation of a new enterprise.

Explain why it is important to bring intangibles into consideration at such times. Can you mention other circumstances that give rise to a consideration of goodwill?

22. Explain how you would determine what constitutes a fair rate of return on which to capitalize goodwill in an industrial enterprise.

23. A coined word sometimes becomes valuable in connection with a trade mark or trade name. The name "kodak" for example, has attained such general usage as to have a very considerable value. Is it possible in such a case to sell the use of the name without transfer of the business? Does this have any bearing on the valuation for accounting purposes on the books of the corporation possessing such an advantage? Does this situation differ from the valuation of ordinary goodwill?

24. One method frequently used in the valuation of goodwill is to multiply the average annual net income by 2, 3, or 4, depending upon the extent to which it is considered that the special benefits are transferable. Can you see any special reason for the use of such multipliers? Does the number of years purchase assumed in the multiplier indicate the rate of depreciation of goodwill?

25. State definitely the position taken by the Internal Revenue Department concerning goodwill in connection with the income tax law.

XVIII. VALUATION OF FIXED ASSETS

1. "Depreciation is simply one phase of the valuation problem as it arises in accounting."

Is the reckoning of depreciation of any particular value?

In the long run, would not depreciation be just about offset by appreciation? If so, why bother about estimating either?

2. "Every property unit retired from service must be replaced by some property of the same value if the capital investment is to remain intact."

Explain the quotation and give examples.

3. Define and give examples of the following items: appreciation, depreciation, depletion, fluctuation, accretion, and obsolescence.

4. A writer in accounting says that in order to provide for the effective use of plant and equipment, it is necessary that "standards of performance be established which may be used to judge the efficiency with which the equipment is used."

Explain and give examples of standards which may be used in this connection.

5. "The business administrator is not particularly interested in the question of asset valuation."

Is this true?

6. "*Repairs* are expenditures which are necessary to maintain the present plant and equipment at its usual efficiency."

"*Replacements* are expenditures which are made to replace with new equipment old equipment that is worn out and discarded."

"*Betterments* are expenditures in connection with present equipment which add to the life or efficiency of the equipment."

"*Additions* are expenditures which are made to obtain new equipment which does not replace other equipment but which

represents an addition to the sum total of the equipment employed by the business."

Explain and give examples of each case. Which are capital charges? Which expense charges?

7. "Depreciation accounting consists primarily in the rational apportionment of the cost of fixed tangible assets over a series of expense accounts."

Explain.

8. "The charge to depreciation expense is a formal recognition of the fact that a part of the investment in fixed assets has been converted into current assets, and insures the retention of these new values within the business."

Give examples showing how this conversion takes place.

9. "Such accounting procedures as the booking of accrued depreciation, the accumulation of discount, and the building up of a sinking fund reserve, consist in mere bookkeeping entries which do not affect the assets of the business in any way." Such actions are only pen scratches and of no practical importance unless accompanied by the setting up of actual funds of marketable securities or other liquid assets."

Criticize.

10. "From the point of view of both accounting and financial .management, the expenditures for repairs, replacements, betterments, and additions are distinctly different, and must be recorded carefully to show properly their effect on the financial condition and operating efficiency of the business."

Show, by example, the effect of improper charging of the above items.

11. Should yearly depreciation be calculated upon an asset such as tools? Why not charge all tools purchased to expense? Why not take a periodical inventory of tools and charge the difference between cash and inventory to expense?

12. There are a variety of ways to calculate depreciation. The following methods are widely used: (1) The straight line method, (2) The declining balance method, and (3) The sinking fund method.

Explain and give examples of each case.

Point out the advantages and disadvantages of each method.

13. "The viewpoint of the professional appraiser is not always that of the accountant or that of the financial executive."

Why is this likely to be true? What effect might the difference in viewpoint have upon the character of the reports?

14. "After all, fixed assets are in their essence but deferred charges to expense and it is important that the business executive sees that his fixed assets are not permanent as he has so often regarded them."

Is this quotation true? Explain.

15. "A balance sheet may show either a Depreciation Fund account or an Allowance for Depreciation account; or both may be present, showing equal or unequal amounts as the case may be, or either may appear in any amount whatever,—and yet in all these cases depreciation may have been adequately accounted for."

Make the entries setting up the Fund and the Allowance.

State, in each case, what is the effect upon the accounts of the balance sheet and of the statement of profit and loss.

16. The following have been mentioned as the main factors in determining the amount of depreciation to be charged against an asset: (1) The original cost, (2) The probable life of the asset, (3) The extent to which repairs and replacements are made, (4) The value that might remain when the asset is finally discarded, and (5) The danger of obsolescence.

Discuss.

17. Is depreciation an element in the cost of manufactured products? If so, how should it be shown on the books?

18. The following definition of real estate has been given: "Real estate is immovable property, usually confined to land and buildings erected thereon."

Should there be any such account as Real Estate in accounting? If not, why?

19. "In arriving at a cost of a building, every item that enters into its construction, or is caused by it, is a legitimate element of the cost."

Suppose an old building must be razed to make room for a new structure. Is this a charge to the new building?

A workman is injured during construction of the building. Legal costs arise. Is this chargeable to the building?

20. Suppose a factory manufactures its own machinery. Should the machinery be valued at whatever it would cost if purchased in the open market? If so, does the concern make a profit? Why not charge the machinery for the cost of labor and material and a part of the factory expense?

21. "It has been frequently stated that a public accountant is not an appraiser; that in the exercise of his professional duties the public accountant may never be called on to make an appraisement."

"It is never the duty of an accountant to forecast."

Criticize.

22. In the process of installing new machines, old machines were moved at considerable cost. State to what account the cost of moving the old machines should be charged. Why?

23. On January 1, 1922, an engine was installed in a factory at a cost of $5,000. It was found, during the course of the year, that the capacity of this engine was not sufficient to meet the factory demands. Accordingly, the engine was replaced by a used engine of greater capacity with an initial cost of $8,000. The discarded engine was sold for $4,000. The cost of making the change was $1,000. The company followed the practice of charging off 10% depreciation annually on the diminishing value basis.

Make and explain the entries necessary to record the above data.

24. The balance sheet of a corporation contains the following accounts among others:

1. Allowance for Depreciation.
2. Allowance for Replacements.
3. Allowance for Additions and Betterments.
4. Allowance for Repairs.
5. Allowance for Contingencies.
6. Allowance for Taxes.

Explain each of these accounts.

25. List, in detail, the various fixed assets accounts of a balance sheet, and indicate, in each case, what valuation should be placed upon them.

26. A new machine has just been installed. Which of the following items should be charged to the cost of the machine:

1. Freight and drayage.
2. Purchase price.
3. Cost of unpacking.
4. Erecting a cement platform for the machine.
5. Testing out the machine.
6. Grease and oil for the later operation of the machine.
7. Cost of alterations to get machine in shape for use.
8. Cost of attaching machine to power, etc.

27. A city block of land was purchased for $20,000. There were claims against the property, and $500 was spent in getting clear title. The purchaser of the land wanted to get the property in satisfactory shape for sale, so $1,000 was spent for leveling, grading, draining, etc. A cost of $500 for trees, etc., was incurred. A sidewalk, costing $800, was constructed around the block.

What is the cost of the property?

A building is constructed on the property at a cost of $10,000. What is the cost of the building? What is the cost of the land?

28. The following have given as causes for depreciation:

"1. Physical
   - a. Wear and tear from operation
   - b. Decrepitude

2. Functional
   - a. Inadequacy and supersession
   - b. Obsolescence

3. Contingent
   - a. Accidents
     - (1) Negligence
     - (2) Elements
     - (3) Structural defects
   - b. Diseases
     - (1) Parasites
     - (2) Pollution of water
     - (3) Growth in water mains
     - (4) Electrolysis
     - (5) Crystallization

c. Diminution in supply
(1) Natural gas
(2) Water."

Explain the outline and give examples of each case.

29. A machine costing $162 has an estimated life of eight years and a residual value of $32. Compute the depreciation, using:

1. The straight line method.
2. The declining balance method.
3. The sinking fund method.

30. The X corporation does not set up allowances for depreciation on any of its fixed assets. It is contended by the directors of the concern that depreciation is offset by appreciation in such assets as land, etc.

Write a letter to the president of the corporation, setting forth your criticism of the attitude of the directors.

31. In order to carry on a program of city development, on January 1, 1924, the city of Sodus decided to make concessions to the Southern Manufacturing Company to induce the company to locate there:

1. To donate land valued at $20,000 to the company provided the company put up a plant to employ 300 or more men.
2. The company is to be free from the payment of any city taxes.
3. The city to donate $15,000 to the company to further the enterprise.

The above provisions were to have been complied with before the lapse of the year 1924. The company, however, during the following year, put up a factory accommodating only 200 men. To provide against just such contingency, the city had stipulated on January 1, 1924, that the company reimburse the city $5,000 on the land and $8,000 of the donation.

Make the entries on the books of the Southern Manufacturing Company for January 1, 1924, and December 31, 1924.

32. A machine was purchased at a cost of $15,000. It was estimated to have a life of twelve years and a residual value of $3,000. During the twelve years, an annual allowance of $1,200 was made. Just before closing the books at the end of the

twelve years, the machine was discarded and sold for $4,000. A similar machine was purchased at a cost of $18,000.

Make the entries to record the situation at the end of the twelve years.

33. A manager is placed in control of assets in a manufacturing concern. How should the manager exercise control over fixed assets?

XIX. VALUATION OF INVESTMENTS

1. A corporation may hold a considerable amount of securities of other corporations for various reasons. A holding company of necessity must own sufficient stock in subsidiaries to insure control. It may hold additional stocks and bonds representing advances made for working capital or extensions and betterments. Some stocks and bonds may be held merely for the income which may be obtained from the interest and dividends which accrue. In many cases securities are purchased in accordance with sinking fund requirements on a company's own bonds. Further, in some cases funds temporarily free from use in financing current operations are invested in securities, the intention being to resell them when increased operations require additional cash funds. Investment houses, brokers and bankers buy and sell securities as a part of their regular business operations in much the same way that a retailer buys and sells merchandise.

(a) Should these various purposes for which securities are held affect in any way the basis of valuation for the balance sheet statement?

(b) State how you would classify the investments in each case as between fixed and current assets.

(c) To what extent are the rules for the accumulation of discount and amortization of premium of use in the valuation in the various instances mentioned?

2. In the published statements of life insurance companies the securities owned are usually listed with two valuations. One is headed "book value" and the other "market value." What is the distinction between the two? Why are both valuations given?

3. Stock speculators, brokers and banks which loan on listed securities, keep in close touch with market prices throughout each day while trading is taking place. Does this fact have any bearing on the proper valuation of the securities owned for balance sheet purposes?

4. The X company purchased for investment $10,000 of 6% bonds due five years from date on June 1, 1925. The purchase was made at a price to yield 5%. On March 1, 1925, additional bonds of the same series were purchased on the same yield basis.

(a) What entries should be made to record the two purchases?

(b) What entries should be made on July 1, 1925, at the time the first bond interest was received?

(c) On October 1, 1925, the bonds were all sold at a price to yield 4%. What entries should be made to record the sale?

5. A trust company purchased a 10-year annuity of $25,000 payable in semi-annual installments. The investment was made on a 5% basis. The purchase was made from the proceeds of an estate which provided that all income should be paid to one beneficiary and for the principal sum to be held intact.

(a) Prepare a table showing the distribution of the annuity payments between income and principal.

(b) Give the journal entries necessary to record the purchase of the annuity for the receipt of the annuity payments during the first two years.

6. The trust company mentioned in the preceding problem invested an additional sum from the same estate in the 6% bonds of the B company, due 25 years from date. The par value of the bonds purchased amounted to $10,000; the price paid was based on a 5% yield. At the end of six months the trust company received $300 in bond interest. How much of this sum could be considered as income and how much a return of principal? Explain how the trust company would account for the bond interest received at each payment date to the beneficiaries of the estate.

7. An additional investment was made from the estate by the trust company mentioned in the two preceding problems in the 6% preferred stock of the C company. The C company has maintained the regular dividend payments on the stock for a number of years and the prospects for continued payments are considered good. The purchase was made on a 5% basis. At the end of six months, the trust company received a dividend check amounting to $300. How should this amount be treated as between income and principal? Compare your answer with the one given in the preceding problem and explain any difference that exists.

8. The Central Trust Company received the sum of $105,-411.33 on March 1, 1925, to invest in accord with the terms of the will of John Smith. According to the terms of the will his widow was to receive all of the income from the estate and his son George was to inherit the entire estate upon the death of his mother. The trust company immediately invested the entire estate in fifteen year 5% bonds in the par value of $100,000. The yield at the purchase price was 4.5 percent.

(a) Show how the first two bond interest payments should be handled by the trust company in accordance with the terms of the will.

(b) If the entire bond interest were paid to Mrs. Smith as income throughout her life, would the son have any claim against the trust company at the time the principal of the estate is paid to him?

9. The Smithers Mercantile Company issued $1,000,000 of 20-year, 6% bonds on January 1, 1925. The bonds were sold at a price to yield 8%. There is a sinking fund clause in the bond contract requiring the company to place a sum in the hands of a trustee each year which is sufficient to accumulate to the par of the bonds at maturity. The trustee agrees to accept the sinking fund contributions on a 4% basis, convertible semi-annually. Give the entries on the books of the corporation for each of the following transactions:

(a) The original issue of the bonds;
(b) The first and second semi-annual interest payments;
(c) The first two sinking fund installments;
(d) The accumulation of interest on the funds in the trustee's hands up to the end of the second year;
(e) The payment of the bonds at maturity.

10. An insurance company purchased $10,000 of the bonds mentioned in the preceding problem. What entries should be made to record the purchase and the first two interest installments? Suppose that the market rate for this class of security changed to 7% on January 1, 1926. How would this fact be recognized on the books of the insurance company?

11. On January 1, 1921, the Blank Textile Company issued $300,000 of first mortgage 10-year, 6% sinking fund bonds of $1,000 denomination, interest payable semi-annually.

The deed of the trust provides that $30,000 shall be taken from the profits on January 1, 1923, and each year thereafter for the purpose of providing a sinking fund. The money shall be turned over to the trustee with instructions to purchase outstanding bonds of the company at 105.

The bonds purchased are to be carried as live bonds, the interest to be added to the sinking fund. The entire bond issue was sold at 95 on January 1, 1921. The discount is to be written off on the straight line basis over the life of the bonds.

When the trustee received $30,000 on January 1, 1923, he immediately purchased 28 bonds at 105. On January 1, 1924, and each year thereafter, the trustee purchased as many bonds as possible out of the available funds at 105.

You are required to draft entries in journal form to record all the transactions relating to the bonds including the original issue of the bonds, the interest payments, the amortization of the discount, the purchase of the bonds by the sinking fund trustee, and closing entries at the end of each year up to the current date.

12. Some companies which carry large investments in securities maintain a reserve for fluctuations to cover possible changes in value due to changes in the market rate of interest. How would you classify such a reserve? Draw up a hypothetical case in which such an account would be used showing the entries for establishing the reserves.

XX. LIABILITIES

1. On many balance sheet statements a distinction is made between short-term and long-term indebtedness. Various terms are used to express this classification, such as: Current and fixed; floating debt and funded debt; current and non-current; current and capital liabilities, etc.

(a) Why is it important to make this distinction?

(b) What is the basis for distinguishing short-term from long-term liabilities?

2. "The liabilities represent the sources from which a part of the capital of an enterprise is obtained. Although the financing of a business is accomplished largely through stock and bond issues, a very considerable part of the total capital employed is obtained from short-term creditors." Show why the statement in the quotation is true. Does the short-term creditor consider himself an investor in the business? If not, how can it be said that current liabilities represent a part of the invested capital?

3. What is the distinction between notes payable and accounts payable? Why is it important in accounting to maintain the two classes of debts separately? Is there a legal as well as a commercial distinction between the two?

4. "Some of the current liabilities are interest bearing and others are non-interest bearing. Part of the short-term financing, therefore, carries a fixed charge burden against income." What are the principal items in the two classes of current assets mentioned? Is the statement in the second sentence of the quotation entirely true? Explain.

5. The exact amount of a concern's liability on open book accounts is rarely stated in the Accounts Payable account. The amount of the cash payment in the settlement of a creditor's account differs from the invoice statement in most cases, because of the special terms stated in the bill of sale. Some of the ad-

justments are due to discounts for prompt payment, allowances for goods which fail to meet specifications, penalty for delayed payments, freight charges allowed to be deducted, and freight paid by the vendor but billed to the purchaser.

(a) Explain how each of the adjustments mentioned affect the statement of accounts payable.

(b) How should the accounts be adjusted to take into consideration discounts allowed by the creditor on bills not yet due at the time a balance sheet is prepared?

(c) If it is true as stated that the accounts payable balance does not represent the true liability on creditors' accounts, does this fact affect the balance sheet statement? How may this fact be taken into consideration in the interpretation of the balance sheet?

6. On January 1, 1925, the Staut Manufacturing Company had no outstanding accounts payable. During the year 1925 materials were purchased on account at an invoice price of $500,000. Possible discounts on these purchases for prompt payment amounted to $10,000. The company settled in full $400,000 of these accounts, taking $8,000 in discounts on the same. No discounts were allowed to lapse. On December 31, 1925, the inventory of materials on hand taken at invoice price was $80,000. The discounts allowed by creditors on these items, some of which have been taken, amount to $1,600.

(a) Show in summary form the Accounts Payable, Purchase Discounts and Materials accounts for 1925 and also how the same should be closed.

(b) Explain how the treatment of possible discounts not yet taken on December 31, 1925, affect the true statement of the liability on creditors' accounts.

7. Occasions sometimes arise when a particular creditor's account shows a debit balance. Is it proper under such circumstances to subtract such an account balance from the total credit balances or should the item be listed as a receivable on the asset side of the balance sheet? Explain.

8. How would you classify a bank overdraft?

9. What is an accrued liability and how is it taken into account on the books? Give an illustration showing the journal entries.

10. What is the distinction between the Accrued Wages account and the Accounts Payable? Would it be proper to use one title "Accounts and Wages Payable" for balance sheet purposes? Is there a legal distinction between a claim on an account and one for wages unpaid?

11. It is a common practice for corporations to award bonuses to employees in addition to regular wages or salaries. How should the amount of accrued bonuses be treated at the time of closing the books?

12. Explain how the liability on consignments is recognized in the accounts. Under what circumstances does a consignee become liable for goods which have been consigned to him? Give an illustration with journal entries showing how consignment transactions are recorded.

13. Explain what is meant by contingent liabilities and show how they are recorded in the accounts. How should they be shown in the balance sheet?

14. The board of directors declare a dividend at a meeting held in November payable on January 30th to stockholders of record December 15th. How should this fact be recorded on the books and how should the amount of the dividend be shown on the balance sheet dated December 31st? Is this a current liability?

15. On the liability side of the balance sheet of the Bayuk Cigar Company for December 31, 1923, the following items are listed: Bills and accounts payable, $1,534,464; Dividends accrued, $56,488; Wages accrued, $5,214; Reserve for Taxes, $136,-920; Reserve for Depreciation, $25,784.

(a) Explain what is meant by each title.
(b) Are there any items which should be further classified?
(c) Which ones are current liabilities?

16. Under what head would you classify Reserve for Taxes which appears on the liability side of a balance sheet?

17. An automobile concern adopts a policy of accepting advance payments before delivery of a car to a customer. The

customer deposits five dollars per week with the company for ten weeks before the car is delivered to him. How would you account for such payments on the books of the automobile company? Would you consider the advance payments current liabilities?

18. An amusement resort company sends out salesmen in the winter to sell season coupon books for admission to the various attractions during the ensuing summer. How should the outstanding coupons be treated on the books and in the balance sheet?

19. One item on the liability side of the J. G. Brill Company for December 31, 1923, is Advance Payments on Contracts, $102,699. This company is engaged in the manufacture of electric railway cars and equipment. What do you understand by this account? Is it a current liability?

20. "A number of the liabilities on some corporation balance sheets represent claims that are not to be met by cash payments. Services must be rendered or products delivered in fulfillment of the debts. Such claims are not like ordinary current liabilities which must be settled by cash disbursements, and should not be carried in the current liability group."

(a) Give illustrations of the types of liabilities mentioned.

(b) Do you agree with the conclusion reached in the quotation? Explain.

21. Most large industrial concerns are made up of a number of separate corporations. In the carrying on of ordinary business operations the various corporations become indebted to each other. Such indebtedness arises from production and sales transactions and from advances on rates, etc. A balance sheet is made up for each separate company which purports to show its true financial condition. How should the liabilities incurred to associated companies be shown in the balance sheet? Should they be differentiated from payables to other concerns?

22. What is meant by the term "Working Capital"? How would you determine the amount of working capital from a published balance sheet?

23. Select a balance sheet of a company published in one of the corporation manuals. List all of the items which appear on the liability side and explain what is meant by each. Prepare a statement of working capital.

24. It is the custom of certain mercantile establishments to give coupons with all cash sales. These coupons may be presented in payment for merchandise. It is expected that a large number will be destroyed and never presented for redemption but a considerable number will be presented. How may a company determine its liability on unredeemed coupons? How should this fact be shown on the balance sheet?

XXI. FIXED CAPITAL

1. "The modern corporation obtains its fixed capital by issuing various types of securities. The financial manager of a company is confronted with a problem which in many respects resembles that of the sales manager. He analyzes the investment market much as the sales manager analyzes the prospective market for the products or services of the corporation. He prepares security issues that are attractive to prospective investors in much the same way as the sales manager prepares his product in attractive style, shape or container."

(a) Is the comparison set forth in this quotation valid?

(b) Draw up a list of all the various types of securities issued by corporations that you know of, setting forth the salient provisions in the security contract in each case.

2. Outline the procedure for the issuing of mortgage bonds. Give the necessary journal entries covering all transactions. What special books or records must be kept by the corporation which apply specifically to the bond issue?

3. What is the distinction between a registered bond and a coupon bond? Does the distinction have any effect upon the accounting procedure?

4. In case a corporation withholds some of the bonds authorized for later use, how should that fact be noted in the accounts and in the balance sheet?

5. What is the position of a mortgage bondholder as compared with that of a holder of a mortgage on business property?

6. Under what conditions will a corporation issue a second mortgage on its property? How do the rights of a second mortgage bondholder compare with those of the first mortgage bondholder?

7. A very common type of security at present is the collateral trust bond. Explain what is meant by such a bond. Under what circumstances would collateral trust bonds be issued? How do these compare with mortgage bonds? Is there any difference in safety?

8. One method of financing the purchase of equipment, particularly in the case of railroads, is through equipment trust bonds. A trust company holds title to the equipment and issues bonds which must be paid by the railroad company. When the bonds have all been paid, the railroad gains full title to the equipment.

How should the equipment and the equipment trust bonds be shown on the balance sheet of the company? Give all the journal entries necessary to record the original purchase, the payment of interest and the payment of the bonds under this form of financing.

9. What are serial bonds and what advantage do they have over an issue with one due date?

10. Some bonds are made callable at a price above par at certain specified dates. What is the purpose of such a callable clause in the bond contract? How does this compare with the serial bond? What entries should be made when a callable bond is redeemed above par?

11. When bonds are called and redeemed by the issuing company, they may either be retired or "kept alive" until the maturity date. Give the journal entries which would be required under both policies and show how the same should be shown on the balance sheet. Are treasury bonds assets?

12. What is meant by income bonds? What are the rights of income bondholders as compared with those of mortgage bondholders? Under what circumstances is it advisable to use this method of financing?

13. What provisions generally prevail in the contract for an issue of debenture bonds? How do such securities differ from debenture stock?

14. What is meant by a convertible bond? Does the fact of convertibility affect the accounting procedure in any way?

15. Describe the various provisions which are possible in an issue of preferred stock. Distinguish between cumulative and non-cumulative preferred stock. In the case of cumulative stock should the unpaid back dividends be treated as a fixed liability?

16. A holding company guarantees the bonds of a subsidiary both as to interest and principal. How should this fact appear on the balance sheet of the holding company?

17. Look up the latest balance sheet of the Goodyear Tire and Rubber Company. (See Moody's *Analyses of Investments.*) List the obligations of this company according to preference to income. Prepare a statement showing the margin of safety for each issue.

18. Prepare a list of the liabilities of the American Telephone and Telegraph Company as shown in the latest published report. Explain what is meant by each of the security titles. Examine the provision covering each issue and show the margin of safety for each, both as to property and as to income for the past two years.

19. Prepare a statement showing the changes in the capital structure of the American Ice Company from 1917 to the latest balance sheet available. Explain as far as possible the various changes which have occurred.

20. Compare the capital structure of the Pennsylvania Railroad Company, The American Telephone and Telegraph Company, and the General Motors Corporation. What differences in financial policy are apparent? Does the nature of the industry have any bearing on the policy of establishing a funded debt?

XXII. SURPLUS AND RESERVES

1. What is meant by the general term "surplus"? What are the principal conditions which give rise to surplus accounts on the books?

2. "Surplus or deficit may originate at the date of organization or either may accumulate subsequently as a result of business operations." What is the significance of organization surplus? How should it be designated on the balance sheet?

3. The following balance sheet is taken from the statement of the Bryan Harvester Co., Inc., as published in Moody's *Analyses of Investments* for 1924:

Balance Sheet December 31, 1923

Assets		*Liabilities*	
Plant and equipment	$ 394,585	Capital stock	$1,185,150
Patents	1,998,000	Stock subscriptions	40,580
Contracts	370,000	Bills and accounts payable	24,233
Liberty bonds	100	Contract sales	400,665
Cash	3,857	Premium on stock, etc.	421,621
Bills and accounts receivable	40,387	Capital surplus	166,713
Inventories	276,970	Donated surplus	1,390,970
Other assets	546,033		
	$3,629,932		$3,629,932

(a) What was the probable origin of each of the surplus accounts?

(b) The company was organized in 1916. Can you distinguish the original surplus from the earned surplus?

(c) Look up the earlier reports of this company. Are these helpful in answering question (b)?

4. The Mercantile Trust Company was organized to carry on a banking business in 1925. Capital stock authorized was $200,000, par value $100 per share. These were sold at $125 per share, affording an initial surplus of $50,000.

(a) Give the journal entries to cover the issue of stock and the establishment of the surplus.

(b) Is there any essential difference between capital surplus in this case and the same item in the preceding problem?

5. The Universal Joint Company organizes with an authorized capital of $2,000,000 in common stock of $100 par value. The original stockholders turn over property valued at $1,000,000 in exchange for the full $2,000,000 authorized stock. Give the journal entries covering the issue of the stock and show the balance sheet after organization. Does this company start with a deficit? What is the chief distinction between the condition of this concern as represented in the balance sheet you have prepared and the Bryan Harvester Company in Problem 3.

6. In the organization of Dodge Bros., Inc., in the spring of 1925, the investment bankers offered for public sale three classes of securities. The bankers had purchased the assets of the old company outright and were selling the securities of the new company to reimburse themselves. In the prospectus which was issued in support of the new securities, the following balance sheet was presented:

General Balance Sheet as of April 1, 1925—Giving Effect to Acquisition of Assets and Proposed Issue of Securities

Assets		*Liabilities*	
Cash	$ 13,621,440	Accounts payable and sundry accruals	$ 14,241,074
U. S. securities	10,553,565	Dealers' deposits	591,410
Municipal bonds and commercial paper	1,995,296	Remainder of 1924 Federal income tax	1,832,508
Other marketable securities	103,620	Res. for contingencies	4,575,796
Accounts receivable	10,153,923	Res. for Federal income taxes (3 mos. 1925)	867,023
Inventories	16,014,478	6% S. F. gold debents.	75,000,000
Secured notes rec.	1,150,000	$7 pref. stock (850,000 shares, no par value)	850,000
Land contracts rec.	1,067,054	Com. class A (1,500,000 shares, no par)	150,000
Invested in subs. with accrued sur.	412,733	Com. class B (500,000 shares)	50,000
Land as appraised	9,265,661	Capital surplus	4,608,682
Land impvts. at cost less depreciation	162,149		
Bldg., mach., equip.	38,191,877		
Prepaid insurance	94,698		
Goodwill	1		
	$102,766,494		$102,766,494

(a) What device in corporation finance was used to enable the corporation to start business with a surplus far in excess of the amount carried in the capital stock accounts? (b) Why was the item "Goodwill" placed in the balance sheet at the figure stated? (c) Shortly after the organization of the corporation, the preferred stock was selling in the New York stock market at $75 per share and the common at $25 per share. Assuming that these prices represent fair valuation of the equities of the two classes of stock, what was the real value of the goodwill? (d) What was the advantage of stating the stock equities at the nominal figures used rather than more nearly representing market values?

7. "The term 'reserves' is used in connection with at least four different types of accounts." What are the four classes of reserves? Give an illustration of each.

8. The Acme Manufacturing Company, a corporation, is organized with a capitalization of $250,000 of which $150,000 is common stock and the remainder preferred. The company buys the plant of the partnership, whose balance sheet appears below, issuing therefor $75,000 of common stock and $25,000 of preferred stock. The partners transfer all assets except cash and the corporation assumes the liabilities.

Partnership Balance Sheet, July 1, 1924

Assets		*Liabilities*	
Cash	$ 10,000	Notes payable	$ 2,000
Notes receivable	30,000	Accounts payable	1,000
Accounts receivable	20,000	Mortgage payable	5,000
Inventory	30,000	A, capital	46,000
Plant and machinery	10,000	B, capital	46,000
	$100,000		$100,000

July 5. The remainder of the preferred stock is subscribed for at 90 and paid in cash.

July 12. Subscriptions to the remainder of the common stock are received at 110 and are paid in cash.

(a) Prepare journal entries for the books of the corporation. December 31.

(b) The gross revenue for the period amounts to $35,000.

The ordinary expenses consisting of materials consumed, labor, light, heat, insurance, etc., total $15,000. The Board of Directors decides to establish the following reserves. (The entries for these transactions will be journalized.)

(1) A Reserve for Depreciation of $1,000.
(2) A Reserve for Taxes of $2,000.
(3) A Reserve Fund of $1,500.
(4) A Reserve for Uncollectible Accounts of $500.
(5) A Reserve for Contingencies of $2,000.
(6) A Reserve for Maintenance of $1,000.
(7) A Reserve for Improvements of $1,000.

In addition to the decisions noted above dividends of 3% on both the preferred and common stock are declared.

(c) Draw up the balance sheet of the corporation. What is the common stockholders' equity, assuming that the preferred stock is non-participating? What are the total liabilities of the corporation?

9. Balance Sheet of the X Company, December 31, 1924

1.	Real estate	$ 150,000	15.	Common stock	$1,000,000
2.	Buildings	500,000	16.	Pref. stock (non-participating) ...	500,000
3.	Accts. receivable ..	80,000	17.	Bonds	400,000
4.	Sinking fund	45,000	18.	Reserve for imp. ..	50,000
5.	Treas. stock (pref).	75,000	19.	Res. for uncollectible accounts ...	5,000
6.	Discount on bonds.	60,000	20.	Res. for maint'n'nce	6,000
7.	Cash reserves	23,000	21.	Reserve for taxes..	13,000
8.	Dis. on pref. stock.	38,000	22.	Res. for depreciat'n	18,000
9.	Notes receivable ..	30,000	23.	Undivided profits ..	40,000
10.	Unissued com. stock	300,000	24.	Dividends payable.	9,000
11.	Cash	75,000	25.	Surplus	70,000
12.	Equipment	250,000	26.	Res. for c'nting'ncies	9,000
13.	Inventories	450,000	27.	Accrued payables..	6,000
14.	Prepaid items	50,000			
		$2,126,000			$2,126,000

Answer the following questions, pertaining to the balance sheet of the X Company. Show how all figures are obtained.

1. What is the amount of the proprietorship?
2. What is the book value of the common stockholders' equity?
3. What was the amount of the original investment of the stockholders, assuming that no stock dividends have been issued?

4. What is the total of the liabilities of the X Company?

5. Give journal entries for the transactions giving rise to the amounts shown in the following accounts: 18 to 27, inclusive, 4, 5, 7, 8, 14.

6. Give journal entries for transactions which would result in the reduction or elimination of the balances in the following accounts: 5, 7, 10, 14, 16, and 18 to 27, inclusive.

10. In a case brought by a taxpayer, the Supreme Court of the United States decided that the receipt of a stock dividend does not constitute income to the individual. Give arguments from the accounting standpoint which substantiate the court's decision.

11. Cash dividends are considered as income to the individual in current income tax procedure. Why are such disbursements to stockholders treated differently from stock dividends? Does the receipt of a cash dividend increase the wealth of the stockholder? Explain.

12. The net income of a corporation for the year 1925 amounted to $100,000. The accumulated surplus to January 1, 1925, was $200,000. The directors make appropriations as follows from the total: A stock dividend of $225,000; a cash dividend of $40,000; a sinking fund reserve of $50,000. What entries should be made? Have the directors created a deficit by their appropriations? Has the increased margin of safety required by the sinking fund reserve been provided for?

13. The following items appear on the balance sheet of the Finley Manufacturing Company on the dates noted:

	December 31, 1924	*December 31, 1925*
Reserve for federal taxes	$ 60,000	$ 75,000
Reserve for depreciation	200,000	235,000
Reserve for maintenance	15,000	8,000
Reserve for uncollectible accounts	5,000	6,000
Reserve for sinking fund	300,000	350,000
Reserve for obsolescence	30,000	50,000
Reserve for additions and betterments..	250,000	275,000
Reserve for inventory losses	50,000	......

Explain what is meant by each item and give journal entries which might account for the changes which occurred in the year 1925.

14. A corporation purchases some of its own stock at a price below par. Does this transaction affect the surplus? Does it make any difference whether the stock is retired or held in the treasury awaiting resale? In either case how should the difference between par and purchase price be represented on the balance sheet?

15. In case a reappraisal of the fixed assets shows a value considerably in excess of the book value and it is desired to bring the appreciation into the accounts, how should this be treated on the books? What effect does it have on the statement of surplus?

16. Are accounting practices which lead to the establishment of secret reserves or elements of surplus known only to officers and directors of a corporation justifiable? What are some of the methods by which secret reserves are created?

17. How may the surplus of subsidiary companies be brought into the balance sheet of a holding company?

18. A large corporation having a number of buildings in different localities, carries its own insurance. A charge is made to expense equal to the amount of insurance premiums which would be required from insurance companies. This amount is credited to Reserve for Fire Insurance. Is this reserve a surplus account? Give reasons for your answer.

19. In the balance sheet of the Crown Cork and Seal Company for December 31, 1922, as published in Moody's Manual, there is one account entitled "Appraisal surplus, $1,759,431," and another entitled "Appreciation of investment in Crown Cork Company, Ltd., London, $407,634." (a) What do you understand by these two accounts? (b) What entries probably gave rise to the establishment of these accounts? (c) Look up the latest published balance sheet of this company and account for the changes which appear in the surplus and reserve accounts.

20. Examine the published balance sheets of the General Motors Corporation and explain the nature of all surplus and reserve accounts. Also explain as fully as possible all changes which have occurred in these items since 1920.

XXIII. EXPENSE AND REVENUE ACCOUNTS

1. What particular advantage is there in the classification of expenses? Expenses, classified or unclassified, do not affect the net income, do they? Discuss.

2. Explain the differences between operating expense and non-operating expense; between operating income and non-operating income. Where should these groups be placed in a statement of profit and loss?

3. State and illustrate the items which might enter into the cost of goods sold in a retail establishment, a wholesale concern, and a manufacturing company.

4. One author presents the equations of a statement of profit and loss in the following way:

"Net sales — cost of goods sold = gross profit on sales.
Gross profit on sales — operating expenses = net profit on sales.
Net profit on sales + non-operating income = gross income.
Gross income — non-operating expense = net income for period.
Net income — appropriations of income = net surplus for period."

Are these equations correct? Discuss.

5. "Thus, the principal source of income for a mercantile store is sales; of a bank, the interest which it receives on loans; of a firm of lawyers, the fees received for services; of a commission house, the commission received on sales."

Take each institution mentioned, and classify the various expenses that each might incur.

6. "In determining the cost of goods sold, therefore, it is necessary to consider three different inventories on hand at the beginning of the fiscal period, three different inventories on hand at the end of the fiscal period, the purchase of materials during the period, the cost of labor for the period and the manufacturing expenses incurred during the period."

Explain the quotation. Are there any expenses not mentioned which should be shown in the cost of goods sold?

7. Imagine a large manufacturing concern wherein a production manager, a stock manager, a sales manager and a purchase manager are employed.

In what portions of a statement of profit and loss is each one interested?

8. "Flexibility should be a characteristic of modern accounting."

If the quotation be true, why recommend a classification of expenditures? Doesn't any classification lead to rigidity?

9. "In consideration of the transactions recorded in the expense accounts of a business, three things should always be kept in mind: (1) The value of goods or services received. (2) Their relation to other expenses of the business. (3) The relation of these expenses to similar expenses in other businesses."

Explain and give examples.

10. "The operating expenses in general are those expenses that are incurred necessarily and directly in carrying on those operations which lead to the earning of the primary or operating income of the business."

Is this a good definition? Define non-operating expenses.

11. "Thus the total 'laid-down' cost of the goods sold includes not only the purchase price of such goods but all freight, express, parcels post, and cartage charges incurred in getting them to the place where they are to be sold."

Does the cost of goods sold include anything else?

12. Should cash discount on sales be treated as a direct deduction from sales, or as further deductions from income?

Present arguments in favor of and opposed to each method of treatment.

13. "Sales discount is partly in the nature of insurance against bad debts, and partly in the nature of interest paid for the use of money between the discount date and the time when the payment would otherwise be due."

Explain.

14. "The distinction must be carefully noted between expenditure, which is the paying or engaging to pay money for something, and expense, which is limited to those expenditures which are part of the cost of carrying on a business."

Is there any great necessity for making a distinction of this kind?

15. What are some of the expenses included under the heading of "Overhead Expense"?

16. "The recognition of such an item as overhead expense is a fairly recent development."

What have been the causes of a universal recognition of overhead expenses?

17. Sometimes expenses are classified according to functions. The following have been mentioned as the functions of a business: Production, purchasing, selling, financing, risk-bearing, administration of personnel, and standards, reports and records.

What advantages or disadvantages do you see in such an expense classification?

Might revenues be classified in the same way?

18. "It is not usual to list the manufacturing expenses in the general statement of profit and loss, since they are numerous and technical in nature, and would not interest the average reader of this report."

Where should the manufacturing expense be listed on a statement of profit and loss?

If not placed in the statement of profit and loss, what procedure should be followed?

19. The following are examples of non-operating incomes: Rentals earned, interest on investments, cash discount on purchases and interest on notes receivable. These are given as non-operating expenses: Expenses on outside investments, cash discount on sales, and interest on notes payable.

Explain each account and indicate where it should be placed in a statement of profit and loss.

20. Point out the advantages and disadvantages in a departmental classification of manufacturing expenses.

Upon what basis might the following expenses be allocated to departments: Heat, light, insurance, taxes, repairs. indirect labor, and depreciation?

21. "The purpose of the accounting records is to show what *has* happened, not what *might* have happened; therefore, all expenses incurred during a period should be charged to the cost of the goods produced during that period."

Criticize.

22. "It is well to point out that cost accounting is as applicable to a mercantile business as to a manufacturing business and is also as applicable to the control of commercial expenses of a manufacturing business as to the control of manufacturing costs."

Explain and give examples illustrating the truth of this quotation.

23. Define and give examples of the following: productive labor, overhead, indirect costs, variable costs and manufacturing expense.

24. The Universal Hardware Retail Company has the following selling departments: furniture, hardware, dishes, and tools. In addition, there are three service departments: delivery service, credit and collections, and advertising.

What classification would you recommend for the company's operating expenses?

25. Should interest on invested capital be included as an item of manufacturing cost?

The following arguments have been made for including interest as an item of manufacturing cost:

1. Profits represent the balance remaining after deductions have been made for the cost of land, labor, and capital.
2. Interest should be included in determining selling price in order to secure a fair return.
3. Interest on investment must be considered in deciding whether to manufacture or buy goods.
4. Time is an important element in many manufacturing processes.

These arguments have been advanced against including interest in manufacturing costs:

1. Interest and dividends are of the same nature in that they are returns on capital. Therefore they should be treated in the same way.
2. Treating interest as a production cost defeats the purpose of cost keeping.
3. It is difficult to determine the rate of interest to be charged.

Explain and give examples of each case.

26. The following purposes are served by the classification of expense data:

"1. To enable the ascertainment of net profits by branches, selling departments, or lines of product.
2. To arrive at unit cost of product in a manufacturing business.
3. To ascertain the rate of gross profit at which a given commodity may be profitably marketed.
4. To find the cost of certain processes per unit of product in order to make possible more accurate cost estimates.
5. To facilitate comparison between periods, branches, departments, different classes of expense, given classes of expense and sales and total production cost.
6. To locate responsibility for the control of each kind of expense.
7. To facilitate the estimating or 'budgeting' of the amount of each class of expense for a future period.
8. To ascertain the cost of performing each of the special functions of the business."

Explain and give examples of each case.

27. The expenses of the Western Retail Company, for the month of January, 1925, were as follows:

Sales errand boy, $10.00; gasoline for truck, $8.00; advertising circulars, $15.00; office boy, $11.00; rent, $80.00; sales clerk salary, $20.00; salary of stenographer, $18.00; typewriter repairs, $5.00; telephone, $1.00; salary of delivery man, $15.00; window trimming, $10.00; janitor's salary, $15.00; telegraph, $2.00; sales clerk commission, $35.00; traveling expenses for buying, $20.00; repairs for delivery truck, $6.00; heat and light, $10.00; rent of warehouse, $25.00; insurance on office building,

$12.00; drayage, $5.00; taxes, $20.00; entertainment of prospective buyers, $25.00, and repairs to furniture and fixtures, $3.00.

Classify these expenses, using the headings buying, selling, delivery, and administrative.

28. The following list of expenses was taken from a set of books:

Fire loss, direct material cost, depreciation of factory, maintenance of store equipment, salaries of managers, depreciation of office furniture, officers' salaries, experimental expense, outward freight, entertainment of customers, bonuses, donations, productive labor, miscellaneous factory expense, taxes, expenses of auditing, directors' fees, depreciation of patterns, depreciation on machinery, postage, and posters.

Miscellaneous office supplies, bad debts, wrapping paper, pensions, advertising, factory supervision, office maintenance, store repairs, watchman's wages, buyers' salaries, delivery expense, workmen's compensation insurance, collection charges, repairs to factory, depreciation on store equipment, salesmen's commissions, and legal expenses.

Classify these expenses using the headings: Buying, selling, production, administration, and miscellaneous.

29. The expenses of the Western Mercantile Company for the year 1924 were as follows:

Salaries of managers, salaries of telephone operators, executive salaries, salaries and commissions of sales force, wages of drivers, miscellaneous salaries, catalogues and circulars, salary of editor of house organ, automobile licenses, garage rent, salaries of floor managers and assistants, wages of porters, wages of lift operators, federal income tax, real estate tax, salaries of warehouse superintendents, salaries of merchandise managers, salaries of advertising managers, salaries of stenographers, bookkeepers, and typists, salaries of buyers and assistant buyers, wages of stock clerk, rent of warehouse, rent of store building, advertising space, wages of cashiers, etc., salaries of electricians, carpenters, and engineers, salaries of window decorators, salaries of mail order department, salaries of delivery employees, store detective salaries, wages of employees in alteration department, state income tax, office and stationery supplies, gasoline and oil, stamps, burglary insurance, depreciation on warehouse, legal service, inspec-

tion fees, gas and electric light, bookkeeping supplies, wrapping paper and twine, and interest on borrowed capital.

Trading stamps, buyers' traveling expenses, repairs on delivery equipment, fire insurance, insurance on life of president, casualty insurance, elevator insurance, accountant's service, dividends on preferred stock, sales books, interest on mortgage, parcels post, traveling expenses of executives, telephone and telegraph, repairs on furniture and fixtures, losses on bad debts, plate glass insurance, water supply, tags, tickets, and labels, membership dues, depreciation on delivery equipment, collection costs, engine and boiler room supplies, gifts, other traveling expenses, miscellaneous expenses, advertising service, entertainment services, damage in delivery, repairs to power equipment, surety bonds, employer's liability insurance, and boiler insurance.

Make a classification of the above accounts and show the position of each account in the classification.

30. The following accounts appeared on the books of the Southern Manufacturing Company on December 31, 1924:

Freight on sales, patent fees, credit reference, miscellaneous selling expense, interest paid, water supply, repairs on building, taxes, sales salaries, car fares and tolls, designing, discount on purchases, legal expense, non-productive labor, food for lunch room, publication advertising, advertising postage, shipping expense, stationery and office supplies, revenue stamps, interest earned, entertaining customers, miscellaneous convention expense, trade journals, charity and donations, telephone and telegrams, shop supplies, factory stationery and office supplies, depreciation on operating equipment, depreciation on buildings, salesmen salaries, samples, trunks and cases, freight and express on catalogues, photographs, house organ, and foreign selling expense.

Administrative salaries, loss on accounts, chattel mortgage expense, sundry management expense, discount on sales, show room expense, factory superintendence and office help, fuel, liability insurance, repairs on machinery and tools, miscellaneous freight and express on material, insurance on operating equipment, insurance on stock, freight on returned sales, salesmen's traveling expenses, cuts, collection fees and expenses, association expense, selling executives' salaries, taxes on stock, sundry factory expense, loss on samples, insurance on buildings, expense material supplies, salesmen's commissions, taxes on building and real es-

tate, sundry salesmen's expense, allowance on sales, office postage, salesmen's auto equipment, sundry advertising and catalogue expense, sundry office expense, advertising service, selling stationery, and exchange.

Use the groups: Factory expense, selling expense and administrative expense. Classify selling expense into salesmen's expense, freight and allowances, advertising and catalogues, and sundry selling expense. Classify administrative expense into accounting department, credit and collections, management expense and financial expense.

Use these general divisions and classify the accounts.

XXIV. COMPARATIVE BALANCE SHEET

1. "The real function of all accounting work is to render a service to business management. The service lies in placing before business executives the most complete information on their affairs, analyzed and interpreted so as to be readily understood and used effectively in guiding and controlling their operations and transactions more profitably, economically and conservatively."

Is this the only function of accounting?

Explain in what way comparative balance sheets and comparative income sheets aid in business management. Give examples.

2. What information of a financial nature may be obtained from the comparative balance sheet and the comparative income sheet?

3. The following information was taken from the balance sheet of the X corporation:

	1924	*1923*	*1922*
Accounts receivable	125,000	115,000	100,000
Notes receivable	130,000	100,000	75,000

Is this a normal condition? How do you account for the changes? Might the condition in 1924 have been normal for a harvesting machine manufacturer? For a manufacturer of locomotives?

4. The following comparisons are possible in analyzing and interpreting balance sheets and income statements:

1. Comparison of one item with another in the same balance sheet.
2. Comparison of one item in the balance sheet of one year, with the same item in the balance sheet of another year.
3. Comparison of one item with another in the same income sheet.

4. Comparison of one item in the income sheet of one year, with the same item in the income sheet of another year.

5. Comparison of items in comparative balance sheets, with items in comparative income sheets.

Select examples of each case, and state the conclusions that might be drawn from the comparisons.

5. It is possible to establish certain ratios or relationships between balance sheet items:

1. Ratio of current assets and current liabilities.
2. Ratio of accounts receivable to notes receivable.
3. Ratio of accounts payable to notes payable.
4. Ratio of owned capital to borrowed capital.
5. Ratio of capital to fixed assets.

Is it possible to determine ratios between these various items?

In each case, point out what information is disclosed, and how such information might serve as a basis for efficient management.

6. An examination of increased inventory in one period over another, may be due to one or more of the following causes:

1. The management may have anticipated increased prices.
2. The volume of business may have increased.
3. There may have been an accumulation of unsalable merchandise.

Is it possible to determine from the balance sheets what is the reason for increased inventories?

Would the calculation of turnover be of any assistance in the third case? How is turnover calculated?

7. Suppose that the balance sheet for 1924 shows an increase in the Building account over the preceding year. This increase may be due to: (1) The addition to buildings, (2) Repairs to buildings, and (3) Appraisal of buildings.

What particular difference does it make which is the cause? Explain how the income sheet will assist in your conclusions.

8. The notes payable of the Y corporation have increased from $50,000 to $200,000 during one year. The accounts payable have increased from $150,000 to $175,000.

What may have been the causes of these changes? May the causes of the changes indicate whether the financial policies of the Y corporation be good or bad?

9. The bonds payable of the Z corporation increased from $40,000 to $60,000 during one year. The mortgages payable increased from $60,000 to $90,000. There was no increase in capital stock. During the same period, fixed assets increased from $200,000 to $225,000.

What are your conclusions?

10. The surplus of the Morris company increased from $200,000 in 1924 to $250,000 in 1925.

Should one conclude from this that the organization is prospering? What may have been the causes of the increase in surplus?

11. Why is it particularly desirable that the balance sheets and income sheets of a concern be prepared in a consistent manner from period to period?

To which portion of the reports should one direct his attention in order to determine whether or not they have been prepared consistently?

12. "A balance sheet can only be an approximation to facts, the degree of approximation depending upon the skill and accuracy with which the estimates are made."

What estimates in the balance sheets are referred to?

Do not the estimates in a balance sheet destroy, in a measure, the value of the balance sheets for comparative purposes?

13. In analyzing the financial condition of a company over a period of time, two questions are of particular importance:

1. What new funds have come into the business and from what sources have they been derived?

2. How have the funds been disposed of or used in the business?

Explain the significance of these two questions. To what accounts should one's attention be directed in order to determine answers to the questions?

14. "The turnover of accounts receivable indicates the economy and efficiency with which capital tied up in accounts receivable is handled."

Explain, using the following data:

	1923	*1924*
Sales	$20,000,000	$20,500,000
Accounts receivable	2,500,000	4,250,000

Calculate the turnover of accounts receivable.

15. "The turnover of fixed property investment is an effective method of stating the relation between the volume of business done and the amount of capital tied up in fixed plant and equipment."

Assume the necessary figures and calculate the turnover on fixed property investment.

16. Analyze the following comparative balance sheets and interpret the statements:

Assets	*1923*	*1924*
Cash	$ 24,000	$ 22,000
Accounts receivable	38,000	30,000
Notes receivable	28,000	34,000
Finished goods	90,000	115,000
Raw materials	18,000	16,000
Investments	20,000	45,000
Goodwill	50,000	50,000
Machinery	55,000	55,000
Buildings	60,000	60,000
Land	90,000	95,000
	$473,000	$522,000

Liabilities		
Reserve for depreciation	$ 44,000	$ 56,000
Accounts payable	27,000	34,000
Notes payable	50,000	5,000
Mortgage payable	5,000	25,000
Common stock	200,000	200,000
Preferred stock	100,000	150,000
Surplus	47,000	52,000
	$473,000	$522,000

Would you advise a client to invest in the company on the basis of the above information?

17. The following balance sheets for the X corporation were set up at the end of the years indicated:

Assets	*1923*	*1924*
Cash	$ 150,000	$ 220,000
Discount on bonds	9,000	8,000
Accounts receivable	100,000	125,000
Merchandise	308,000	320,000
Additions and betterments	110,000	430,000
Machinery	215,000	250,000
Buildings	160,000	150,000
Land	75,000	75,000
	$1,127,000	$1,578,000

Liabilities		
Reserve for depreciation	$ 80,000	$ 90,000
Reserve for sinking fund	85,000	185,000
Accounts payable	12,000	45,000
Notes payable	12,000	75,000
Bonds	225,000	400,000
Common stock	300,000	600,000
Preferred stock	150,000	150,000
Surplus	263,000	33,000
	$1,127,000	$1,578,000

Analyze the balance sheets for the two years, and indicate the character of the operations.

18. The following balance sheets were taken from the books of the Acorn Manufacturing Company:

Assets	*1923*	*1924*
Cash	$ 29,000	$ 26,000
Accounts receivable	132,000	162,000
Materials	443,000	439,000
Prepaid insurance	4,000	3,000
Bond discount	26,000	24,000
Bonds	50,000	50,000
Patents and goodwill	1,500,000	1,500,000
Machinery and tools	317,000	327,000
Buildings and land	391,000	397,000
Deficit	....	27,000
	$2,892,000	$2,955,000

Liabilities		
Accounts payable	$ 33,000	$ 52,000
Notes payable	50,000	200,000
Bonds	560,000	503,000
Common stock	1,200,000	1,200,000
Preferred stock	1,000,000	1,000,000
Surplus	49,000	....
	$2,892,000	$2,955,000

Explain the changes in the accounts, and give an historical survey of the financial activities of the business over the two-year period.

19. The following are the balance sheets of a wholesale grocery company for the year indicated:

Assets	*1923*	*1924*
Machinery, equipment, etc.	$ 43,467	$ 41,555
Investments	10,854	26,492
Cash	9,847	27,663
Accounts receivable	606,612	766,226
Notes receivable	16,334	9,770
Accrued interest	443	1,667
Inventories	877,551	1,020,935
Sinking fund	248	274
Other assets	....	4,180
Deferred items	38,850	35,281
Total	$1,604,206	$1,934,043
Liabilities		
Capital stock	$ 774,000	$ 750,900
Accounts payable	215,735	232,986
Notes payable	192,000	570,000
Accrued interest	206	446
Reserve for taxes	11,244	7,076
Deferred items	232	282
Surplus	410,789	372,353
Total	$1,604,206	$1,934,043

The company has 7% cumulative preferred stock, authorized, $400,000; outstanding, $350,000; par, $100. The company has also: Common stock, authorized, $800,000, outstanding, $400,000; par, $100. The concern covenants to maintain net current assets at 150% of outstanding preferred. Dividends have been paid regularly.

Interpret the balance sheets of this company.

20. The following balance sheets are those of a publishing company:

Assets	*1923*	*1922*	*1921*	*1920*
Real estate and mach'ry	$ 1,470,429	$ 879,146	$ 716,340	$ 744,029
Inventory	2,342,722	2,766,731	2,260,703	1,517,484
Cash, accts. rec., etc.....	4,697,265	3,698,831	3,999,464	4,478,273
Copyrights	4,554,816	4,586,087	5,001,927	5,001,967
Total	$13,065,232	$11,930,795	$11,978,434	$11,741,753
Liabilities				
Capital stock	$ 8,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
Bonded debt	1,513,000	1,518,000	1,518,000	1,563,000
Accounts payable	514,138	458,732	453,120	370,077
Surplus and reserves	3,038,094	4,954,063	5,007,314	4,808,676
Total	$13,065,232	$11,930,795	$11,978,434	$11,741,753

Analyze and interpret the balance sheets.

21. The following company manufactures a soft drink:

Assets	*1923*	*1922*	*1921*
Property account	$ 6,933,412	$ 6,154,203	$ 5,767,091
Goodwill, etc.	20,656,387	20,400,231	24,966,230
Cash	2,367,604	2,804,307	894,808
Notes and accounts receivable...	1,399,511	1,110,656	1,715,186
Inventories	1,779,264	1,548,478	1,816,993
Government securities	3,400	19,207	19,669
Stock for employees	....	....	....
Prepaid items	67,367	24,970	47,375
Other assets	260,686	140,783	282,592
Total	$33,467,631	$32,062,052	$35,509,944
Liabilities			
Preferred stock	$10,000,000	$10,000,000	$10,000,000
Common stock	15,010,000	15,010,000	15,010,000
Notes payable	31,000	78,000	2,165,750
Accounts payable	694,659	514,554	1,024,897
Accrued liabilities	2,153	1,950	2,752
Dividends payable	1,225,000	....	....
Reserve for Federal taxes	681,517	897,000	427,000
Deferred items	92,587	....	81,500
Surplus	5,730,715	5,560,548	6,798,045
Total	$33,467,631	$32,062,052	$35,509,944

Analyze and interpret the balance sheets for the three-year period. Save for future use.

22. Analyze and interpret the following balance sheets of a rubber company:

Assets	*1922*	*1921*	*1920*
Plant, equipment, etc.	$ 4,333,600	$ 4,392,782	$ 4,275,787
Goodwill	1,875,375	1,874,875	1,874,875
Investments	482,624	....	23,548
Organization expenses	....	....	....
Inventories	2,579,309	2,375,596	7,408,966
Cash	536,806	584,994	301,991
Notes and accounts receivable..	2,936,859	3,046,237	4,148,130
Advances, etc.	....	145,106	....
Deferred charges	395,049	77,442	336,205
Other assets	34,578	....	7,351
Deficit	....	3,317,738	....
Total	$13,174,200	$15,814,770	$18,376,854
Liabilities			
Capital stock	$ 9,182,263	$10,000,000	$10,000,000
Premium on capital stock	....	....	....
Bonded debt	2,847,800	....	....
Accounts and notes payable	1,117,601	5,814,770	6,761,373
Reserves	....	....	....
Surplus	26,536	....	1,615,481
Total	$13,174,200	$15,814,770	$18,376,854

Preserve for future use.

23. The following balance sheets are those of an automobile manufacturing company:

Assets	*1922*	*1921*	*1920*
Real estate	$ 992,163	$ 978,200	$1,079,548
Machinery and equipment	1,319,331	1,657,978	1,406,264
Inventories	1,832,697	4,975,553	3,361,384
Cash and accounts receivable	675,089	885,642	1,531,236
Other assets	142,136	361,960	320,311
Total	$4,961,416	$8,859,333	$7,698,743
Liabilities			
Capital stock	$2,295,000	$2,384,400	$2,418,500
Floating debt	1,617,638	1,555,908	1,503,228
Notes and accounts payable	663,265	1,929,630	1,510,410
Profit and loss	385,513	2,989,395	2,266,605
Total	$4,961,416	$8,859,333	$7,698,743

Analyze and interpret these balance sheets.

24. The following company is engaged in the manufacture of automobile accessories:

Assets	*1923*	*1922*	*1921*
Property account	$2,131,742	$1,988,872	$1,936,494
Patents	190,848	185,952	168,552
Liberty bonds, etc.	130,608	132,856	....
Cash	761,949	576,895	232,459
Notes and accounts receivable	254,727	286,593	522,117
Inventory	681,732	587,501	203,763
Other assets	35,769	34,896	11,467
Deferred charges, etc.	139,355	146,982	215,894
Total	$4,326,730	$3,940,547	$3,290,746

Liabilities			
Capital stock	$ 375,000	$ 375,000	$ 375,000
Accounts and notes payable	172,246	129,836	55,894
Reserve for Federal taxes	125,000	86,000	10,000
Depreciation of plant and equipment	591,179	479,243	415,513
Surplus	3,063,305	2,870,468	2,434,339
Total	$4,326,730	$3,940,547	$3,290,746

Analyze and interpret these balance sheets.
Preserve for future use.

25. The following are the balance sheets of a moving picture corporation:

Assets	*1923*	*1922*	*1921*
Plant and equipment	$ 2,439,099	$ 2,248,945	$ 2,386,464
Goodwill, etc.	2,944,410	2,980,732	3,140,612
Sub. cos. invest., etc.	1,477,383	2,044,314	1,964,402
Inventories	5,030,712	3,106,470	4,101,135
Advance to authors, etc.	176,017	471,409	574,317
Notes and accounts receivable	343,136	420,282	316,255
Cash	941,739	717,116	593,544
Liberty bonds	....	36,450	36,450
Lease deposits	....	....	34,391
Sinking fund cash	204,060	....	266,756
Stock subscriptions	43,226	64,839	75,702
Deferred charges	467,660	275,043	364,778
Deficit	1,859,458	1,405,588	408,890
Total	$15,926,900	$13,771,188	$14,263,696

Liabilities			
Capital stock	$11,503,716	$11,543,706	$10,139,806
Minority interest	524,433	528,648	556,659
Notes payable	1,300,000	....	1,755,100
Mortgages	780,000	870,000	960,000
Advances	417,788	427,282	555,160
Current liabilities	1,400,963	401,552	296,971
Total	$15,926,900	$13,771,188	$14,263,696

Analyze and interpret the balance sheets.
Preserve for future use.

26. The following are balance sheets of a five and ten cent store:

Assets	*1923*	*1922*	*1921*
Real estate, buildings, etc.	$12,756,809	$11,948,768	$ 8,328,528
Furniture and fixtures	11,347,610	9,711,754	12,099,115
Goodwill	20,000,000	30,000,000	50,000,000
Treasury stock	....	1,975,842	472,045
Securities	1,120,266	1,256,540	1,330,834
Mortgages receivable	77,500	106,500	74,250
Inventory	23,302,108	20,920,896	16,194,461
Cash	6,273,458	9,576,288	11,050,799
Notes and accounts receivable	715,371	513,877	703,034
Advance payment	697,894	536,679	83,910
Interest, etc., accrued	....	25,459	10,803
Deferred charges	11,411,330	8,347,615	6,517,020
Total	$87,702,346	$94,920,218	$106,864,799

Liabilities			
Preferred stock	....	$10,000,000	$ 10,000,000
Common stock	$65,000,000	65,000,000	65,000,000
Mortgages payable	2,721,353	2,822,735	1,914,500
Accounts payable, etc.	719,463	659,134	661,965
Preferred dividends pay	....	175,000	175,000
Reserve for taxes	6,000,000	3,000,000	3,500,000
Reserve for depreciation	....	....	3,474,384
Reserve for benefit fund	100,000	2,600,000	100,000
Surplus	13,161,530	10,663,349	22,038,950
Total	$87,702,346	$94,920,218	$106,864,799

(a) What new funds have come into the business?
(b) How have the funds been used?

(c) Write a report to the president of the company giving criticisms or suggestions.

(d) On a basis of A, B, C, D, how would you rate the company?

Preserve for future use.

27. The company considered herewith is a mail order house:

Assets	*1922*	*1921*	*1920*
Building, patents, sec., etc....	$ 56,942,985	$ 52,928,182	$ 57,820,193
Investments in affil. cos.	4,473,947	3,931,762	3,920,447
Supplies and merchandise ...	34,737,518	46,445,830	105,071,244
Due from customers, etc.	28,879,650	40,478,778	47,797,134
Cash	8,470,403	10,867,860	3,263,353
Purchase money mtg. notes..	12,000,000	12,000,000	....
Marketable securities	2,201,748	11,285,673	8,887,220
Deferred charges	5,161,669	6,880,730	3,908,606
Total	$152,867,920	$184,818,815	$230,668,197

Liabilities			
Preferred stock	$ 8,000,000	$ 8,000,000	$ 8,000,000
Common stock	100,000,000	100,000,000	105,000,000
Serial notes	16,907,900	33,297,200	50,000,000
Notes payable	576,535	25,488,000	44,560,165
Accounts payable	13,818,931	8,247,827	10,623,905
Accrued items	273,510	494,411	....
Pref. dividends payable	139,797	139,797	139,797
Reserve for taxes	654,671	596,464	1,356,207
Other reserves	5,874,989	6,809,509	3,423,749
Surplus	6,621,587	1,745,607	7,564,374
Total	$152,867,920	$184,818,815	$230,668,197

(a) Analyze and interpret these balance sheets bearing in mind general business conditions in 1921.

(b) Write a report to the president of the company, including besides your analyzation and interpretation, your criticisms and suggestions for the succeeding years.

(c) Rate the company. Would you advise a client to invest in this concern.

Preserve for future use.

28. The following comparative balance sheets are those of a large telephone and telegraph company:

Assets	*1923*	*1922*
Stock associated companies, etc.	$ 858,675,656	$ 767,956,583
Bonds, notes, adv. (assoc. companies)...	178,147,274	115,671,083
Telephones	33,275,286	29,666,204
Real estate, etc.	13,052,833	12,369,484
Long distance tel. plant and equipment.	125,671,228	108,757,168
Cash	25,217,740	26,517,547
Temporary cash investments	62,218,589	93,162,767
Accounts receivable	10,443,626	9,831,006
Total	$1,306,702,232	$1,163,931,842
Liabilities		
Capital stock	$ 753,501,507	$ 715,083,854
Funded debt	309,825,500	226,604,800
Dividends payable	16,539,125	15,719,753
Interest and taxes accrued	8,168,929	7,630,586
Accounts payable	7,754,816	6,465,453
Reserve for depreciation and cont.	75,985,329	68,514,833
Employees' benefit reserve	6,000,000	5,000,000
Surplus	....	31,471,956
Appropriated surplus for dividends	128,927,026	87,440,607
Total	$1,306,702,232	$1,163,931,842

Explain the various accounts. Analyze and interpret the balance sheets, and state in narrative form the history of the business for the years covered. Preserve for future use.

29. The following comparative data are those of one of the leading railroad companies of the United States:

Assets	*1923*	*1922*
Investments:		
Road and equipment	$289,749,919	$248,254,818
Investments in affiliated companies ...	226,488,357	217,371,685
Other investments	7,159,512	15,035,513
Miscellaneous physical property	1,292,768	1,523,856
Current assets:		
Cash	7,935,264	10,469,752
Special deposits	7,835,348	7,418,668
Loans and bills receivable	112,862	37,644
Accounts and balances receivable	11,260,960	11,911,920
Other current assets	1,655,828	702,123
Materials and supplies	21,212,529	13,022,310
Deferred assets:		
Other deferred assets	175,326	127,189
Unadjusted debits:		
Other unadjusted debits	7,149,906	6,830,786
Total assets	$582,028,579	$532,706,264

Liabilities

Capital stock	$130,889,692	$120,225,467
Grants in aid of construction	32,272	32,272
Funded debt	292,512,640	272,014,045
Premium on capital stock	21,500	....
Current liabilities:		
Loans and bills payable	3,000,000	....
Accounts and wages payable	27,058,247	22,241,518
Merchandise accounts payable	3,032,818	3,656,536
Interest matured	1,922,624	1,940,789
Dividends	2,291,212	52,698
Accrued items	1,873,580	1,756,686
Other current liabilities	355,924	2,612,420
Deferred liabilities:		
Other deferred liabilities	149,332	107,029
Unadjusted credits:		
Operating reserves	....	1,404,703
Accrued depreciation	38,679,328	35,005,313
Other unadjusted credits	19,959,050	17,127,022
Corporate surplus:		
Appropriated surplus	8,021,392	7,897,314
Profit and loss—balance	52,228,968	45,632,452
Total liabilities	$582,028,579	$532,706,264

Explain the various accounts. Analyze and interpret the balance sheets.

State in narrative form the history of the business for the years covered.

Preserve for future use.

30. The student should select some company in which he himself is particularly interested. He should then resort to a publication, such as Moody's Manual, for comparative balance sheets and income sheets. If such data are not available, the student might get in touch with the company directly and secure the information desired.

Analyze and interpret the data.

What are your conclusions? Write your conclusions in the form of a report.

XXV. COMPARATIVE INCOME SHEET

1. "The art of expression is nearly, if not fully, as essential a part of the accountant's equipment as is his knowledge of accounting principles."

Show in what respects the quotation is true.

2. Of what aid is the comparative income sheet in the efficient management of a business?

Give specific examples showing how income sheets are valuable in managing a manufacturing business.

3. Does it necessarily follow that a business is prosperous if the sales increase? What items of an income sheet might increase to offset the additional revenue from increased sales?

4. Sales returns and allowances may increase either because poorer services are being given the customers, or because an effort is being made on the part of a company to establish itself in new territory. Is there any way of determining which is the case from analyzing an income sheet? What concessions might a company make to customers which would tend to increase sales returns and allowances?

5. Which is more important in analyzing an income sheet: to show that items like sales and sales returns and allowances have increased over preceding periods, or to show that the ratio between sales and sales returns and allowances for one period have increased over other periods? Why?

6. Suppose gross profits on sales increase from period to period. Is this a favorable indication? Might not some comparison be made to show that even under such circumstances the situation is not favorable?

7. Oftentimes the cost of goods sold increases at a rapid rate. What suggestions would you make as to the possibility of cutting down the cost of goods sold?

8. There are two ways of determining merchandise turnover:

1. Divide the cost of goods sold during the year by the cost of the average inventory of the year.
2. Divide the sales at sales price by the average inventory for the year at sales price.

Discuss.

9. What do we mean by merchandise turnover? What is the significance of merchandise turnover?

What relationship do you see between the rate of turnover and overhead costs? Illustrate.

Suppose the rate of turnover in a given business decreases. What of it?

10. Suppose the ratio between sales and selling expense were to increase greatly one year over another. Is there any need for alarm? Might not such a condition be justified, say over a two or three year period?

What would you suggest as a means of cutting down selling expense?

11. In a certain concern, the ratio of net operating profit to sales was 6% in 1923, and 3% in 1924. In spite of this fact, net income for 1924 was greater than that of 1923. How do you account for this state of affairs?

12. It is observed on the balance sheets of the X corporation that there are no allowances for depreciation or for bad debts. Sometimes such items as these are left off the balance sheets for the sake of brevity. Is there any way of determining, from the report, whether or not such allowances have been made?

13. The following data are taken from the balance sheets of the Y corporation:

	1922	*1923*	*1924*
Accounts receivable	250,000	200,000	175,000
Notes receivable	50,000	125,000	295,000

Sales discounts for the same periods decreased:

Sales discounts	40,000	15,000	5,000

What conclusions may be drawn from these data?

The same company has a large increase of notes payable over accounts payable. Purchases discounts have decreased.

What conclusions may be drawn?

14. The sales of the Z corporation increased by 25% in 1924 over 1923. During the same period, the merchandise inventory increased by 50%. Merchandise turnover decreased from 3 to 2.

What conclusions may be drawn?

15. The Surplus account of the A company showed an increase of $30,000 during the year 1924. The net profits, for the same period, were only $20,000.

How can one account for the increase of $10,000 in the Surplus during the year?

16. It is the function of an income sheet to tell the story of the transactions and operations of a business. The story is told particularly in the following sections of the income sheet: (1) Volume of sales, (2) Cost of goods sold, (3) The margin of gross profit, (4) The various operating expenses, (5) The net profit, (6) The non-operating incomes and expenses, and (7) The net profit available for dividends or transfer to the Surplus account.

Explain and elaborate, stating how each section aids in interpretation.

17. "The turnover of total capital used expresses the relationship existing between the volume of business done and the total investment employed."

Assume the necessary data and show the truth of the quotation.

18. In Problem 21 of the preceding chapter, the balance sheets of a soft drink manufacturing company were given.

The income statements for the same three years were as follows:

	1923	*1922*	*1921*
Sales	$24,320,064	$21,053,834	$28,464,599
Operating, selling expense, etc.	19,097,379	13,826,672	25,118,591
Other deductions	45,576	61,719	575,018
Taxes	648,000	897,000	425,000
Net profit	$ 4,529,109	$ 6,268,443	$ 2,345,990
Preferred dividends	700,000	700,000	700,000
Common dividends	3,625,000	2,250,000	500,000
Surplus	$ 204,109	$ 3,318,443	$ 1,145,990
Earned on preferred	45.29%	62.68%	23.46%
Earned on common (per share)	$7.66	$11.14	$3.29

Analyze and interpret the balance sheets and income sheets.

Do these income sheets substantiate the conclusions drawn in your solution of Problem 21 of the preceding chapter?

19. The comparative income account of the rubber company, the balance sheets of which were given in Problem 22 of the preceding chapter, was as follows:

	1922	*1921*	*1920*
Net sales	$12,298,474	Not stated	$17,515,361
Oper. expense, dep., etc.	12,054,074	Not stated	17,292,786
Reserve for taxes	....	....	55,449
Net profit	$ 244,400	(d)$ 4,753,474	$ 167,128
Interest charges	217,864	452,103	400,496
Balance	$ 26,536	(d)$ 5,205,577	(d)$ 233,368
Dividends	....	....	1,100,000
Surplus	$ 26,536	(d)$ 5,205,577	(d)$ 1,333,368
Earned on stock (per share)	$0.06	....	....

Interpret the condition of the company, using these additional data. Need you revise the conclusions you reached in solving Problem 22?

20. The balance sheets of a company manufacturing automobile accessories were given in Problem 24 of the preceding chapter.

The following is the comparative consolidated income account covering the same three years:

	1923	1922	1921
Net sales	$1,656,376	$1,217,474	$1,762,014
Manufacturing cost	631,049	446,891	1,339,778
General expenses	28,852	80,320	330,566
Federal taxes	125,000	86,000	10,000
Net income	$ 871,475	$ 604,263	$ 81,670
Dividends	656,250	168,750	....
Surplus	$ 215,225	$ 435,513	$ 81,670
Earned on stock (per share)	$11.62	$8.06	$1.09

Analyze and interpret the condition of the company with the use of both the balance sheets and the income account.

21. The comparative income account for a mail order house was as follows:

	1922	1921	1920
Gross revenues	$160,648,153	$150,034,519	$233,856,872
Operating expenses	160,807,183	177,963,577	229,436,224
Gross profits	(d)$ 159,030	(d)$ 18,929,058	$ 4,420,648
Other income	5,865,957	5,005,202	11,516,546
Total income	$ 5,706,927	(d)$ 13,923,856	$ 15,937,194
Reserves for taxes, etc.	....	2,511,612	2,430,310
Association charges	271,759	....	1,172,880
Employees' bonus	....	....	587,333
Surplus over charges	$ 5,435,168	(d)$ 16,435,468	$ 11,746,671
Preferred dividends	559,188	559,188	559,188
Common dividends	....	2,099,470	7,198,028
Final surplus	$ 4,875,980	(d)$ 19,094,126	$ 3,989,455
Earned on preferred	67.94%	....	146.83%
Earned on common	4.88%	....	10.05%

The balance sheets of this company for the same periods were given in Problem 27 of the preceding chapter.

Interpret the reports in the light of the new data.

22. The comparative income account of the five and ten cent corporation given in Problem 26 of the preceding chapter is as follows:

	1923	*1922*	*1921*
Gross revenues	$193,447,010	$167,319,265	$147,654,647
Operating ex. and taxes......	172,748,830	148,994,866	133,861,688
Total net income.......	$ 20,698,180	$ 18,324,399	$ 13,792,959
Preferred dividends	....	700,000	770,000
Common dividends	5,200,000	6,500,000	5,200,000
Premium on preferred stock..	....	2,500,000	145,375
Surplus	$ 15,498,180	$ 8,624,399	$ 7,677,584
Earned on preferred.........	....	183.24%	137.93%
Earned on common.........	31.84%	27.11%	20.04%

Using all of the reports, interpret in the light of the additional data.

23. The balance sheets of a telephone and telegraph company are given in Problem 28 of the preceding chapter.

The following is the comparative income account for the same period:

	1923	*1922*
Gross revenues:		
Dividends	$ 54,078,663	$ 44,922,929
Interest, etc.	13,371,563	12,509,901
Telephone operating revenues...............	71,840,735	65,324,890
Total gross	$139,290,961	$122,807,720
Operating expenses	43,901,043	41,139,280
Net earnings	$ 95,389,918	$ 81,668,440
Fixed charges	13,697,737	15,498,012
Surplus above charges	$ 81,692,181	$ 66,170,428
Margin of safety	86%	81%
Dividends paid	63,274,388	52,971,252
Reserve	3,000,000	5,000,000
Final surplus	$ 15,417,793	$ 8,199,176
Earned on stock	11.35%	11.14%

Use the above additional information, and analyze and interpret the reports.

24. The balance sheets of a railroad company were given in Problem 29 of the preceding chapter.

The following is the comparative statement of income and profit and loss:

	1923	*1922*
Operating revenues:		
Freight	$127,081,544	$119,849,020
Passenger	27,042,400	24,264,251
All other	11,503,037	10,747,116
Ry. operating revenues	$165,626,981	$154,860,387
Operating expenses		
Main. of way and structures	24,406,198	20,538,117
Maintenance of equipment	39,445,189	36,236,120
Traffic	2,408,276	2,314,554
Transportation	61,989,250	55,934,969
Misc. and general	4,180,318	4,105,509
Ry. operating expense	$132,429,231	$119,129,269
Net railway operating revenues	33,197,750	35,731,118
Operating ratio	79.96%	76.93%
Railway tax accruals	9,672,915	11,208,967
Uncollectible railway revenues	24,052	15,413
Ry. oper. income	$ 23,500,783	$ 24,506,738
Total oper. income	$ 23,500,783	$ 24,506,738
Non-operating income:		
Rent from equipment, etc.	2,538,659	2,398,804
Income from lease of road	58,015	61,138
Dividend income	2,164,737	1,164,737
All other non-operating income	4,593,988	2,878,590
Total non-operating income	$ 9,355,399	$ 6,503,269
Gross income	$ 32,856,182	$ 31,010,007
Income deductions:		
Rent for equip., etc.	3,133,198	1,784,414
Other and misc. deducts.	563,278	Dr. 119,926
Total deductions	$ 3,696,476	$ 1,664,488
Bal. before fixed charges	29,159,706	29,345,519
Fixed charges	13,674,632	13,255,843
Net income	$ 15,485,074	$ 16,089,676
Profit and loss—balance	52,228,968	45,632,452
Earned on preferred	114.69%	150.07%
Earned on common	13.55%	14.29%

Use this material with the balance sheets and write a report on the condition of the company. Would you advise a client to invest in this company?

25. The Profit and Loss account of a moving picture corporation, for the dates given, was as follows:

	1923	*1922*	*1921*
Net profit	$407,733	(d)$303,388	$496,359
Interest, discounts, etc.	244,978	409,277	321,364
Guaranteed dividend	200,000	....	200,000
Other charges	416,625	284,032	661,822
Deficit	$453,870	$996,697	$686,827

The balance sheets of this same company may be found in Problem 25, in the preceding chapter.

Analyze the data in their entirety.

How should the company be rated?

26. The following is the comparative consolidated income account of a large steel manufacturing company:

	1922	*1921*	*1920*
Gross sales and earnings	$1,092,697,772	$ 986,749,719	$1,755,477,025
Mfg. cost and oper. exp.	926,591,343	837,664,039	1,402,488,960
Adm. gen., and sales exp.	30,331,295	30,710,764	35,945,537
Taxes, disc., etc.	42,652,480	43,440,101	87,074,170
Balance	$ 93,122,654	$ 74,934,815	$ 229,968,358
Income adjustments (net)	17,586,299	26,942,694	44,240,415
Total income	$ 110,708,953	$ 101,877,509	$ 185,727,943
Depreciation and deplet.	42,688,508	36,768,226	46,684,364
Bal. before fixed chg.	$ 68,020,445	$ 65,109,283	$ 139,043,579
Interest on co.'s bonds	19,232,305	19,679,582	20,105,559
Int. on sub. co.'s bonds	8,259,606	8,065,222	8,408,461
Premium on bonds redeemed	875,079	747,462	835,332
Net income	$ 39,653,455	$ 36,617,017	$ 109,694,227
Margin of safety	60%	56%	79%
Preferred dividends	25,219,677	25,219,677	25,219,677
Common dividends	25,415,125	25,415,125	25,415,125
To surplus	(d)$ 10,981,347	(d)$ 14,017,785	$ 59,059,425
Earned on preferred	11.01%	10.16%	30.45%
Earned on common	2.84%	2.24%	16.62%

Analyze and interpret the above material.

27. The following comparative balance sheet is that of the Western Wholesale Company:

WESTERN WHOLESALE COMPANY

Comparative Balance Sheet, Dec. 31, 1923, and Dec. 31, 1924

Assets	*1924*	*1923*
Cash	$ 22,000	$ 24,000
Accounts receivable	84,000	98,000
Notes receivable	106,000	44,000
Mdse., inventory	520,000	275,000
Equipment	20,000	18,000
Deferred charges	14,000	12,000
Goodwill	50,000	50,000
Building	80,000	75,000
Land	130,000	120,000
Total	$1,026,000	$ 716,000
Liabilities		
Accounts payable	$ 125,000	$ 60,000
Notes payable	100,000	42,000
Bonds payable	65,000	38,000
Mortgage payable	66,000	44,000
Capital stock	400,000	400,000
Surplus	270,000	132,000
Total	$1,026,000	$ 716,000

The comparative statement of profit and loss for the same period was as follows:

WESTERN WHOLESALE COMPANY

Comparative Statement of Profit and Loss

	1924		*1923*	
Gross sales	$1,000,000		$ 800,000	
Less sales returns & allowances	24,000	2.4%	8,000	1.0%
Net sales	976,000	97.6%	792,000	99.0%
Cost of goods sold:				
Beginning inventory	275,000		120,000	
Purchases	1,000,000		800,000	
	$1,275,000		$ 920,000	
Less ending inventory	520,000		275,000	
Cost of goods sold	$ 755,000	75.5%	$ 645,000	80.7%
Gross profit on sales	221,000	22.1%	147,000	18.4%

Operating expenses:				
Administrative:				
Heat and light	5,000		3,000	
Office salaries	12,000		8,000	
Telephone and telegraph	400		200	
Legal expense	1,000		500	
Clerk hire	5,000		5,000	
Total administration expense	$ 23,400	2.3%	$ 16,700	2.1%
Buying	$ 12,000	1.2%	$ 10,000	1.2%
Selling:				
Advertising	20,000		10,000	
Salesmen's salaries	40,000		30,000	
Clerk hire	4,000		4,000	
Miscellaneous	1,000		1,000	
Total selling expense	$ 65,000	6.5%	$ 45,000	5.7%
Delivery	$ 2,000	0.2%	$ 1,000	0.1%
Total operating expense	$ 102,400	10.2%	$ 72,700	9.1%
Net operating profit	$ 118,600	11.8%	$ 74,300	9.3%
Further additions:				
Purchase discounts	4,000		5,000	
Interest on notes receivable	300		300	
Total additions	$ 4,300	0.4%	$ 5,300	0.6%
Gross income	$ 122,900	12.2%	$ 79,600	9.9%
Further deductions:				
Sales discount	2,000		16,000	
Interest on notes payable	8,000		2,000	
Interest on bonds payable	2,000		2,200	
Interest on mortgage payable	2,000		2,000	
Total deductions	$ 14,000	1.4%	$ 22,200	2.7%
Net income	$ 108,900	10.8%	$ 57,400	7.2%

Analyze and interpret the balance sheets and the statements of profit and loss of the Western Wholesale Company.

28. The following is the trial balance of the Sheldon Mercantile Company:

SHELDON MERCANTILE COMPANY

Comparative Trial Balance. December 31, 1923, and December 31, 1924

	1924		*1923*	
Cash	$ 30,000	....	$ 26,000	....
Accounts receivable	140,000	....	160,000	....
Notes receivable	130,000	....	75,000	....
Merchandise inventory	800,000	....	400,000	....
Deferred charges	22,000	....	16,000	....
Office equipment	30,000	....	28,000	....
Goodwill	60,000	....	62,000	....
Building	120,000	....	110,000	....
Land	200,000	....	180,000	....
Accounts payable	....	$ 150,000	....	$ 80,000
Notes payable	....	350,000	....	75,000
Bonds payable	....	75,000	....	60,000
Mortgage payable	....	50,000	....	65,000
Capital stock	....	600,000	....	300,000
Surplus	....	487,000	....	791,000
Sales	....	1,800,000	....	1,200,000
Sales returns and allowances	13,000	....	3,000	....
Purchases	1,770,000	....	1,400,000	....
Office salaries	26,000	....	14,000	....
Heat and light	7,000	....	6,000	....
Salesmen's salaries	42,000	....	20,000	....
Buying expense	16,000	....	14,000	....
Telephone and telegraph	1,500	....	1,000	....
Salesmen's expenses	60,000	....	35,000	....
Sales clerks	8,000	....	7,000	....
Advertising	40,000	....	16,000	....
Purchase discount	....	20,000	....	10,000
Sales discount	5,000	....	1,000	....
Interest on notes receivable	....	1,000	....	1,000
Interest on notes payable	4,000	....	3,000	....
Interest on bonds payable	4,000	....	2,000	....
Interest on mortgage payable	4,500	....	3,000	....
	$3,533,000	$3,533,000	$2,582,000	$2,582,000

Supplementary data for 1924:

Merchandise inventory, December 31, 1924, $1,000,000.

Depreciation:

Office equipment, 20%.
Building, 10%.

Allowance for bad debts, 2% of accounts receivable.

Deferred charges:

Prepaid advertising, $5,000.

Accrued items:

Interest on bonds, $1,000.

Required:

(a) Make a comparative balance sheet.

(b) Make a comparative balance sheet in the form shown in Problem 27 and figure the percent of sales in respect to each important item.

(c) Interpret and analyze the data.

29. Select a large industrial concern, secure the recent balance sheets and statements of profit and loss from Moody's Manual or a similar publication, and analyze and interpret the reports.

30. Use Moody's Manual, or a like publication, secure therefrom the comparative balance sheets and statements of profit and loss of a large railway organization, and analyze and interpret the reports.

31. Select some local concern. Secure its balance sheets and statements of profit and loss and any other data which are available.

Analyze and interpret the reports.

Write a report to the president stating your criticisms and recommendations.

XXVI. RATIOS AND CHARTS

1. What is meant by an operating ratio? Give examples of operating ratios and show how such ratios are of value in financial management.

2. "A standard is an expression of (a) the desired method of performing an activity or (b) the desired or expected result from the performance of an activity or group of activities." Discuss.

3. The following ratios and standards may be used in the analysis of industrial financial statements:

"1. Measure of earnings:
   a. The return earned on net worth
   b. The ratio of surplus net profits, to sales
   c. Earnings on common stockholders' investments
   d. Operating profits earned on total capital used
   e. Ratio of operating profits to sales
   f. Margin of gross profits earned on sales.

2. Measures of cost and expense:
   a. Ratios of costs and expenses to sales
   b. The cost of borrowed capital
   c. The cost of total capital used.

3. Turnovers:
   a. Turnover of total capital used
   b. Turnover of inventories
   c. Turnover of accounts receivable
   d. Turnover of fixed property investment.

4. Financial relationships:
   a. Net working capital and ratio
   b. Manner in which capital is invested
   c. Sources from which capital is secured
   d. Proportion of earnings left in the business."

Explain and give examples of each of these ratios and standards. See J. H. Bliss, "Management Through Accounts," and "Financial and Operating Ratios in Management," for a detailed development of this subject.

4. The following may be used as measures of operating efficiency: "Measures of labor efficiency, such as the output per man per hour; measures of machine or operating efficiency; relationship of non-operating income and expenses; income earned on non-operating investment, both gross and net, and the income received from investments and securities in relationship to the amount of capital invested."

Discuss.

5. It is frequently stated that ratios, relationships and standards are barometers in the management of business affairs.

Select some representative ratios and explain in what way they are barometers.

6. In a manufacturing business, financial and operating ratios may be computed on the basis of each department.

In this case, what should the financial and operating ratios include?

7. "The general rule is to compute ratios of selling and general expenses to net sales, and to base unit costs of selling and general expenses on the net physical volume of sales."

Explain.

8. The following are some of the essentials of a satisfactory standard in business:

A standard should be simple, it should be flexible, it should be determined after careful investigation, it should be capable of revision, and it should be possible of comparison with the actual performance.

Name some business standards and state whether or not they conform with the above essentials.

9. A writer on accounting gives the following classification of standards: Standards of procedure, financial standards, and operating standards.

Give one example of each kind of standard and show how it may be used in business.

10. "Business standards may be affected by social and political standards."

Give examples and prove the truth of the quotation.

11. The following ratios have been suggested as an aid in interpreting financial statistics:

"1. The relation of borrowed capital to total capital.
2. The relation of owned capital to total capital.
3. The relation of each kind of assets to total assets.
4. The relation of current assets to current liabilities.
5. The relation of borrowed capital to the cost of capital.
6. The relation of net profit to total capital.
7. The relation of net profit to net worth.
8. The relation of gross sales to gross profits.
9. The relation of sales to net profit.
10. The relation of sales to inventories.
11. The relation of sales to accounts receivable.
12. The relation of sales to fixed assets.
13. The relation of sales to total assets.
14. The relation of costs and expenses to sales.
15. The relation of average inventory to the cost of goods sold."

Explain and elaborate.

12. The balance sheets of a soft drink manufacturing concern are given in Chapter 24, Problem 21. The income statements of the same company are given in Chapter 25, Problem 18.

Draw a graph showing Property Account, Cash, Notes and Accounts Receivable, Inventories, Notes Payable, Accounts Payable, Surplus, Sales, Expenses and Net Profit.

How does this method of presentation assist in interpretation?

13. Make a graph of the most important accounts of the rubber company, the balance sheets of which may be found in Chapter 24, Problem 22, and the comparative income sheet of which may be found in Chapter 25, Problem 19. Interpret.

14. Follow the suggestions given in Problem 12. Use the data which are given in Chapter 24, Problem 24, and Chapter 25, Problem 20.

15. Chapter 24, Problem 25, contains the balance sheet of a moving picture corporation. Chapter 25, Problem 25, contains the Profit and Loss account of the same company.

Draw a graph of the most important accounts. Interpret.

16. Use Problem 26, Chapter 24, and Problem 22, Chapter 25. Draw a graph and interpret.

17. The reports of a mail order house may be found in Problem 27, Chapter 24, and Problem 21, Chapter 25.

Draw a graph of the important accounts. Interpret the data.

18. Use data in Problem 28, Chapter 24, and Problem 23, Chapter 25. Graph and interpret.

19. The following balance sheets were taken from the books of a partnership on the dates indicated:

JENSIN AND JENNINGS

Comparative Balance Sheets. December, 1923, and December, 1924

	1924	*1923*
Assets		
Current:		
Cash	$ 5,000	$ 6,500
Accounts receivable	25,000	23,000
Notes receivable	1,000	2,000
Merchandise inventory	50,000	42,000
Fixed:		
Furniture and fixtures	2,500	3,000
Delivery equipment	2,000	1,500
Total assets	$86,000	$78,000
Liabilities		
Current:		
Accounts payable	$25,000	$20,000
Notes payable	5,000	4,000
Total liabilities	$30,000	$24,000
Proprietorship		
Jensin	28,000	27,000
Jennings	28,000	27,000
	$86,000	$78,000

Show these comparative balance sheets in graphic form.

20. The reports of a large railway organization may be found in Problem 29, Chapter 24, and in Problem 24, Chapter 25.

Draw a graph of the most important accounts. Interpret with the aid of this method of presentation.

Would you advise a client to invest in the corporation?

21. A firm estimated that its sales would gradually increase from $20,000 in January to $80,000 in December. The actual sales were: January, $5,000; February, $15,000; March, $10,000; April, $20,000; May, $45,000; June, $35,000; July, $50,000; August, $45,000; September, $65,000; October, $40,000; November, $25,000; December, $20,000.

Chart the estimated, actual, and average sales for the year.

22. The statement of profit and loss of a mercantile concern, on December 31, 1924, was as follows:

THE SIMS WHOLESALE COMPANY

Statement of Profit and Loss. January 1, 1924-December 31, 1924

Sales		....	$160,000
Cost of goods sold:			
Mdse. Inv. Jan. 1		$ 36,000	....
Purchases		130,000	....
		$166,000	
Mdse. Inv. Dec. 31		40,000	126,000
Gross trading profit		....	$ 34,000
Administrative expenses:			
Office salaries	$ 4,000		
Depreciation	4,000		
Other expense	1,000	9,000	....
Selling expense:			
Advertising	$ 5,000		
Salesmen's sals.	10,000	15,000	24,000
Net profit		....	$ 10,000

Show the statement of profit and loss in graphic form.

23. The balance sheet of a mercantile firm, on December 31, 1924, was as follows:

THE WELLS WHOLESALE COMPANY

Balance Sheet, December 31, 1924

Assets		
Current:		
Cash	$ 2,000	
Accounts receivable	10,000	
Merchandise inventory	12,000	
		$24,000
Fixed:		
Furniture and fixtures	$ 1,000	
Buildings	12,000	
Land	3,000	
		26,000
Total assets		$50,000
Liabilities		
Current:		
Accounts payable	$ 2,000	
Notes payable	6,000	
		$ 8,000
Fixed:		
Bonds payable		4,000
Total liabilities		$12,000
Proprietorship		
Capital stock	$25,000	
Surplus	13,000	
		38,000
		$50,000

Show the above information in graphic form.

24. Draw up detailed organization charts for the following enterprises: (1) A retail establishment; (2) A wholesale concern; and (3) A manufacturing company.

25. Draw up a procedure chart for a wholesale establishment. Draw up a floor chart showing the routine in filling orders in a wholesale concern.

26. What is a mode? A median? An arithmetic average? A geometric average?

Point out the advantages and disadvantages in the use of these averages in compiling business data.

27. "By the weighted average, we mean one whose constituent items have been multiplied by certain weights before being added, the sum thus obtained being divided by the sum of the weights instead of by the number of items."

When should the weighted average be used? Why need it be used?

28. "The extent and the character of the accounting material which may be gathered for business purposes may be seen from the following:

1. Analysis of purchases: By commodities, by departments or units of responsibility, by terms of credit, by vendors and by buyers.
2. Analysis of production.
3. Analysis of sales: By periods, by products, commodities, or departments, by credit terms, by territories, by methods of sale, by classes of customers, and by methods of delivery.
4. Correlation of various departments.
5. Analysis of expenses: Buying expenses, selling expenses, delivery expenses, and administrative expenses.
6. Analysis of labor conditions: Labor supply, turnover, scale of wage payment, absenteeism, and welfare work.
7. Market analysis: Geographical, climatic, seasonal, social, financial, competition and distribution."

Explain, in each case, how a compilation of such material should aid in business administration.

29. The following advantages in tabulating data have been enumerated: Regularity and order in arrangement, a lesser tax on the memory, group relationships more easily visualized, tabulation facilitates comparisons, summation is facilitated, and explanatory data are largely eliminated.

Explain and elaborate.

30. The following are the condensed balance sheet and the condensed income statement of a corporation:

Assets	*Amount*	%
1. Current:		
2. Cash	$ 15,000	
3. Accounts rec.	100,000	
4. Notes receivable..	75,000	
5. Merchandise inv. .	10,000	
6. Total current	200,000	
7. Investments	40,000	
8. Deferred charges ..	10,000	
9. Intangibles	50,000	
10. Fixed:		
11. Equipment	50,000	
12. Plant	100,000	
13. Land	50,000	
14. Total fixed	$300,000	
15. Total assets	$500,000	
Liabilities and Proprietorship		
16. Current:		
17. Accounts payable..	$ 50,000	
18. Notes payable ...	25,000	
19. Total current	$ 75,000	
20. Fixed:		
21. Bonds payable ...	$ 50,000	
22. Mortgage payable.	50,000	
23. Total fixed	$100,000	

	Amount	%
24. Proprietorship:		
25. Cap. stock pref. ..	$100,000	
26. Cap. stock com. ..	200,000	
27. Surplus	25,000	
28. Total prop.	$325,000	
29. Total liab. & prop.	$500,000	
30. Sales	$500,000	
31. Cost of goods sold	300,000	
32. Gross revenue	$200,000	
33. Operating exp:		
34. Administration ...	25,000	
35. Factory	75,000	
36. Selling	35,000	
37. Delivery	15,000	
38. Total oper. exp. ..	$150,000	
39. Operating profit ..	$ 50,000	
40. Fixed charges	10,000	
41. Surplus net profs..	$ 40,000	
42. Divs. on pref.	6,000	
43. Divs. on common.	20,000	
44. Net profits	$ 14,000	

Determine the following facts:

1. The net working capital (6 — 19).
2. Net working capital ratio (6 ÷ 19).
3. The capital invested (each of 1 — 14 to 15).
4. Sources of capital (17 — 28 to 28).
5. Percent earned to proprietorship (41 ÷ 28).
6. Percent earned on common stock (43 ÷ 26).
7. Cost of borrowed money (40 ÷ [18 + 21 + 22]).
8. Percent of operating profits on total capital (39 ÷ 15)
9. Turnover of all capital (30 ÷ 15).
10. Turnover on fixed property (30 ÷ [11 + 12]).
11. Turnover of inventories (30 ÷ 5).
12. Turnover of receivables (30 ÷ [3 + 4]).

Point out any other important relationships.
Analyze and interpret the data.

XXVII. BUDGETS

1. "Budgets serve both as standards by which to control current operations and as a means of co-ordinating the activities of the several departments."

Is a budget an operating standard?

2. Make an organization chart for a large manufacturing concern.

Show how the budget may be used to control current operations, and to co-ordinate departmental activities.

3. In business, a comptroller is sometimes in charge of the budget. This is occasionally true in municipalities. Since appropriations are commonly vested in the board of directors, or in a legislative body, how is it possible to have such a plan as an executive budget?

4. Enumerate the various duties which devolve upon an executive in charge of budgeting procedure.

5. "The accounting records can provide quite useful analyses if these records are properly constructed and operated. The thing standing in the way of this is the conception of bookkeeping as a science of formulas for the all important purpose of arriving at net profit or loss."

How should the records be kept for the purpose of analyses? What are the formulas alluded to in the quotation?

6. "The following factors should be considered in determining the length of the budget period: (a) length of turnover period, (b) length of production period, (c) market conditions, (d) adequacy of statistical data available."

Show how a consideration of each factor will aid in determining the length of the budget period.

7. "The procedure to be followed by a business firm in the installation and operation of budgetary control will of necessity vary, depending primarily on the organization of the business and the nature of its operation."

What suggestions would you make as to budgetary procedure in a retail concern? A wholesale concern? A manufacturing concern?

8. Is there any connection between such internal checks in management as the budget, and the fact that our national resources are not so plentiful as formerly? Between such internal checks as cost accounting, and competition?

9. The following procedure is sometimes followed in the installation and operation of budgetary control:

1. Each department makes estimates of probable expenses and revenues.
2. The departmental estimates are then submitted to the executive in charge of the budget.
3. The executive in charge of the budget revises the estimates and endeavors to correlate expenses and revenue.
4. The tentative budget is submitted to a budget committee for approval.
5. After the budget is passed, each department receives a copy for its guidance.
6. A careful check is made upon each department to compel uniformity of execution.

(a) Draw a chart showing budgetary procedure.
(b) Explain and discuss each step in the budgetary procedure.

10. In making a budget for a future period, it is usual to base the estimates upon past records. What criticism is there to the plan of using past records only? What other things should be taken into consideration? Enumerate.

11. Use the comparative balance sheets and comparative income sheets in Problem 27, Chapter 25. Assume that sales are to increase by fifty percent for the succeeding period. Set up an estimated balance sheet and an estimated income sheet for that year.

12. At the time the United States Government was planning the adoption of a budget, it was suggested that one of the prime essentials of a proper budget was to place it directly under the president. What advantage is there in such an arrangement? Was the suggestion followed?

Trace the history of the Federal Budget controversy, elaborate upon the form of budget adopted, and explain how it works.

13. The initial step in the budget program in commercial enterprises is usually made by the sales department.

Can the program be carried very far without a correlation with other departments? What departments particularly and why?

14. "The sales estimate is made up on the basis of: Knowledge of general plans and policies, knowledge of trade conditions, knowledge of amount and nature of previous sales, the judgment of the sales units, the judgment of the central sales office, the production or purchasing capacity of the business, the gross profit-earning capacity, the selling and administrative cost, the financial requirements of the program contemplated, and the co-ordination of the departmental estimates."

Explain and elaborate.

15. How should a selling expense budget be prepared? What devices may be used to control the selling expense budget?

16. How is it possible to determine production requirements? What devices might be used in setting up production requirements and controlling them?

17. "After the production budget is prepared, the production department can prepare an estimate of the labor required to produce the goods called for by this budget."

How may this be done?

18. What procedure is necessary for the preparation and control of the financial budget?

Explain and elaborate.

19. What administrative reports may be used in formulating and enforcing plans in commercial enterprises?

20. Point out the various advantages and limitations of budgetary control.

21. "The term 'budget' in its broadest sense and as it is now interpreted, means not only a request for appropriations and authority to collect revenues with which to meet them, but the information which may be submitted by the administration in support of these requests."

A budget is "a plan for financing an enterprise or government during a definite period, which is prepared and submitted by a responsible executive body to a representative body whose approval and authorization are necessary before the plan may be executed."

Explain these definitions.

22. "The many changes which have taken place in recent years have tended to develop a new budget procedure which demands that we reconsider fundamental concepts. The budget is to be not merely an appropriation ordinance, but an instrument and process of government. As an instrument, it is a means of getting before the representative body which has control of the purse, a plan for the execution of which funds are to be appropriated. As a process of government, it is a procedure to insure accountability for funds already granted, and for securing responsibility for a definite program of work to be undertaken in the future."

As applied to municipalities, do you think this a good statement of the proposition? Comment.

23. We speak of a municipal budget as being a plan for internal and external control.

Give examples and explain how the budget may be used in both capacities.

24. Make a complete organization chart for a municipality, indicating elected and appointed officials. Show in the same chart a satisfactory budget procedure.

25. How may a budget serve as both a means of negative and positive control? Is it better to have negative control or positive control in the budget?

26. The following material was taken from the Chicago budget for 1909:

"For repairs and renewals of wagons and harness, replacement and keep of live stock, identification, police telegraph expenses, tents, repairs, renewals of equipment, hospital service, printing and stationery, secret service, heat and light, 25 more horses for mounted police, and for repair of Hyde Park station; also other miscellaneous expenses . . . $205,000."

What is your opinion of this method of budget making? What would you suggest?

27. The following factors or conditions have been mentioned as necessary to secure control in the making of a budget for a municipality:

1. "A single executive authority responsible for the making of the budget.
2. The assistance of department heads and budgetary staff in making the estimate.
3. Complete accounting records upon which to base the department estimates.
4. Use of standards in such activities as purchasing and administering personnel.
5. A work program for each department,—each departmental plan to be a part of a complete administrative work program.
6. The encouragement of positive control rather than negative control.
7. A budget calendar so that the budget in preparation might progress according to schedule.
8. Public hearings at various stages so that taxpayers might present their views.
9. Control activities on the part of the legislative body."

Explain how control is secured in each case.

28. There are three types of municipal budgets: The lump sum type, the highly segregated type, and the segregated or flexible type.

Explain what is meant by each type. Which do you favor?

29. Why is there great necessity for classification of expenses and revenues for the purpose of a municipal budget? What classification would you recommend?

30. "The following information is helpful in the revision of a municipal budget:

1. An estimate of expenses for each department.
2. An estimate of revenues for each fund or department.
3. A comparison of the total expenditures for the last several fiscal years.
4. A statement for the reasons for the proposed increases in expenditures.
5. A schedule of what is necessary for the department to do.
6. A statement of payroll increases or additional payment to present employees.
7. A statement of the total revenue from taxes.
8. A statement of revenue from other than taxes.
9. The amounts required for interest on the city debt and for sinking fund.
10. The total outstanding city debt with maturities of bonds."

Explain each of the above and show what each group should contain.

XXVIII. INSOLVENCY STATEMENTS

1. What statements are drawn up to present the affairs of an insolvent business? Give a form of such statements without figures.

2. "The chief distinction between a balance sheet for a going concern and a statement of affairs for an insolvent company lies in the basis for valuation of assets." What is the difference in the basis of valuation in the two statements?

3. What is the purpose of a Realization and Liquidation account? Give an illustration showing the form of such a statement without money amounts.

4. What other methods are available besides procedure in bankruptcy in winding up the affairs of an insolvent concern?

5. How does a receiver in bankruptcy obtain his appointment and what are his duties?

6. Railroads, banks and insurance companies may not take advantage of the general bankruptcy law upon becoming insolvent. Explain why this is true and state the procedure which must be followed in case of insolvency of such concerns.

7. Investment bankers who have been responsible for the sale of a corporation's bonds often take active control of the management when its affairs become involved. This often is accomplished without resorting to foreclosure proceedings. Every possible effort is made to maintain operations in the interest of the secured creditors.

(a) Why do investment bankers take this position rather than to allow bankruptcy proceedings to be brought in accordance with the mortgage indenture?

(b) Why do the corporation's directors permit the control to pass to the bankers under such circumstances?

8. Creditors' committees frequently take over an insolvent business, reorganize the enterprise and allow operations to continue. What is meant by a creditors' committee? How do they obtain their appointment? What authority does such a committee have to reorganize such a business?

9. Explain what is meant by secured creditors, preferred claims, unsecured creditors in the case of a bankrupt concern.

10. Following is a comparative balance sheet for the Hamilton Manufacturing company. The company failed to pay the bond interest in 1925. Insolvency proceedings were instituted and a receiver was appointed.

Balance Sheet as of June 30

Assets	*1925*	*1924*
Real estate and buildings	$ 989,782	$ 982,231
Equipment	920,100	921,103
Materials	26,391	33,881
Accounts receivable	32,197	18,661
Notes receivable	18,750	15,930
Cash	12,035	14,011
Finished goods	137,064	122,947
Profit and loss	68,498	45,796
	$2,204,817	$2,154,560

Liabilities		
Capital stock	$ 500,000	$ 500,000
Bonded debt	1,000,000	1,000,000
Notes payable	351,000	331,000
Accounts payable	320,874	250,726
Accrued wages	7,010	43,000
Accrued taxes	4,884	5,342
Accrued interest on bonds	11,207	10,492
Contingent reserves	9,842	14,000
	$2,204,817	$2,154,560

(a) On the basis of the following additional facts, prepare a statement of affairs: (1) The real estate and buildings are expected to bring $700,000 at forced sale. (2) The equipment can be sold for $450,000. (3) Materials are valued at $20,000. (4) Accounts receivable to the extent of $5,200 are worthless and $3,500 of the notes receivable are uncollectible. (5) The fin-

ished goods are worth 50% of the book value. (6) The bonds are secured by a mortgage on the real estate and buildings. (7) The equipment is pledged as security for the notes payable.

(b) Assuming that the estimates prove accurate and that the fees and expenses incident to liquidation amount to $2,000, draw up a deficiency statement.

11. The Staub Manufacturing Company has been forced into liquidation. The following is a balance sheet representing the condition at the time foreclosure proceedings were instituted:

Assets		*Liabilities*	
Real estate	$140,000	Capital stock	$225,000
Equipment	75,000	Mortgage bonds	75,000
Patents	50,000	Accounts payable	125,730
Investments	35,000	Notes payable	80,000
Cash	5,050	Reserve for depreciation	4,358
Notes receivable	2,475		
Accounts receivable	31,110		
Inventories	83,424		
Goodwill	40,000		
Profit and loss	48,029		
	$510,088		$510,088

The real estate is valued at $95,000 and equipment at $35,000. The patents can be sold for $50,000. The investments are carried on the books at par. These have been pledged as security on $25,000 of the notes payable. At present prices the investments will bring $23,000. The notes receivable are worth $2,000. Of the accounts receivable, $10,000 are good, $5,000 are worthless, and it is estimated that of the balance 80% will be collectible. The inventories are estimated at half the book value. Goodwill is worthless. Interest on the bonds has accrued to $800 not shown on the statement, and on notes payable to $500. Wages accrued but not paid, amount to $1,500.

Prepare a statement of affairs and a deficiency statement. Assume that all estimates prove correct and that the expenses of liquidation amount to $3,500.

12. The Stone Machine Company found it necessary to suspend payment to creditors on January 1, 1925. A receiver was appointed with instructions to operate the company in the

interests of the creditors. The balance sheet on January 1, 1925, was as follows:

Assets		*Liabilities*	
Real estate	$125,000	Capital stock	$100,000
Equipment	85,000	Bonds	100,000
Raw materials	25,000	Notes payable	95,000
Goods in process	60,000	Accounts payable	115,000
Finished goods	15,000	Interest on bonds	3,000
Notes receivable	12,000	Int. on notes payable	3,300
Accounts receivable	113,000	Accrued taxes	1,850
Cash	1,500	Reserve for depreciation	9,300
		Surplus	9,050
	$436,500		$436,500

The transactions for the first year of the receivership were as follows in summary form:

(a)	Old accounts receivable, collected	$108,000
	Old accounts receivable, uncollectible	5,000
(b)	Old notes receivable, all collected	12,000
(c)	Old notes paid by receiver	30,000
(d)	New notes to settle for old accounts payable of same amount	55,000
	Accounts payable paid by receiver	60,000
(e)	Sales on account	450,000
(f)	Collections on new accounts receivable	390,000
(g)	Cash purchases of raw materials	150,000
(h)	Other cash payments:	
	Wages paid	200,000
	Interest on bonds	8,000
	Interest on notes payable	6,500
	Taxes	2,500
	Manufacturing expenses	25,000
	Selling expenses	12,000
	General expenses	8,000

The following inventories were taken at the end of the year: Raw materials, $20,000; goods in process, $28,000; finished goods, $45,000; accrued taxes, $1,500; accrued interest on bonds, $3,000; accrued interest on notes payable, $2,500; depreciation on building, $2,500; on equipment, $1,500.

Prepare:

(a) Journal entries on the receiver's books and on the company's books.

(b) Trial balances from both sets of books at the end of the year.

(c) Income sheet for the receiver.

(d) Balance sheet for the receiver.

13. The receiver of the Stone Machine Company (preceding problem) returned the properties to the corporation as of January 1, 1926.

Give the entries on the books of the receiver and the books of the company. Prepare the balance sheet of the company.

XXIX. AUDITING

1. What constitutes the principal work of a firm of public accountants?

2. The term "auditor" is used variously to designate a public practitioner, a corporation officer, a bank examiner, a public utility commission employee, etc. Describe the character of the work performed in each case mentioned.

3. In large business enterprises, internal auditors, members of the staff of the concern, are frequently the only ones employed. Where this is the case is it desirable that professional certified public accountants should be engaged? Give reasons.

4. What meaning attaches to the term "auditing" other than the revision and verification of accounts representing past transactions?

5. In what way do the functions of accountants and auditors differ?

6. Is there any essential difference between a formal audit and an examination as conducted by an auditor? What are some of the purposes of examinations?

7. Are there any new accounting principles involved in the field of auditing? Does the auditor need any additional equipment beyond a thorough knowledge of accounting?

8. Give a general outline of procedure for a detailed audit of a manufacturing corporation.

9. To what extent should an auditor hold himself responsible for the correctness of (a) inventories, (b) value of fixed tangible assets, (c) valuation of goodwill?

10. Outline the procedure for a balance sheet audit.

11. What steps may an auditor take to ascertain the correctness of the customers' ledger?

12. A company had an appraisal of its real estate and buildings made just prior to the close of the year. The appraisal figures greatly exceeded the net book values. The company desires to have the appraisal figures brought on the accounts and shown in the balance sheet. How should an auditor treat this situation? If the new figures are placed in the accounts, what offsetting credit should be made for the increased value?

13. Does an auditor certify that the condition of a firm is exactly as represented on the balance sheet or does he qualify his certificate? Just what reliance may be placed on a certificate of an auditor by a creditor, banker, or other interested party?

14. In closing its books as of December 31, 1925, the X Manufacturing Company included sales of $50,000 of merchandise which was packed and ready to be delivered to customers in the month of January, 1926. Would you approve this procedure? Would this affect the statement of the certificate on the balance sheet or the income sheet?

15. A corporation having several branch offices maintains a general ledger account with each branch. All goods shipped to the branch are billed at selling price and charged to the branch account. The branch account is credited with remittances after the branch house has disposed of the goods. In preparing the statements at the end of the year the company included the debit balances in the various branch accounts in the statement of accounts receivable. What action should an auditor take on discovering this fact?

16. The books of a company show the following cash balances on hand December 31, 1925:

Cash in bank	$8,298.42
Cash on hand to be deposited	425.98
Cash in imprest fund	200.00
Total cash	$8,914.30

The bank book was balanced on January 15, 1926, at the time the auditor began the annual audit. The balance shown by

the bank statement was $12,265.82. Explain how the auditor would verify the cash balance as of December 31, 1925.

17. The following is the trial balance of the Cole Manufacturing Company on December 31, 1925:

Cash	$ 1,000	......
Accounts receivable	100,000	......
Notes receivable	10,000	......
Plant and machinery (at cost)	200,000	......
Inventories, January 1, 1925	80,000	......
Purchases	200,000	......
Manufacturing expenses	20,000	......
Labor	100,000	......
Selling expense	20,000	......
Administrative expense	10,000	......
Sales	......	$400,000
Accounts payable	......	20,000
Notes payable	......	30,000
Capital stock	......	250,000
Surplus	......	41,000
	$741,000	$741,000

An audit of the books disclosed the following facts:

The corporation commenced business January 1, 1914, and no depreciation has been entered to date. The inventory at December 31, 1925, amounted to $50,000. This did not include $15,000 of goods received late in December for which invoices had not yet been received. Included in the accounts receivable were old accounts dating back to 1920.

Prepare a report from the above data such as an auditor would submit to a client.

18. What steps should be taken by an auditor to verify the various classes of securities outstanding at the end of the year?

19. How may an auditor ascertain whether or not all of the liabilities of a company on open book account are listed in the vouchers payable account?

20. Should the auditor examine the minute book of a corporation in connection with an audit of the accounts? Explain why?

XXX. CONSOLIDATED BALANCE SHEETS

1. Under what conditions is it advisable to construct a consolidated balance sheet?

2. What constitutes control of a corporation by a holding company? Is mere voting control a sufficient basis for treating a subsidiary company as part of a consolidated organization?

3. What purpose is served by a consolidated balance sheet? How does such a statement differ from one which shows the totals of the accounts of the various associated companies?

4. What adjustments must be made in a consolidated balance sheet with reference to each of the following:

(a) Inter-company current accounts.
(b) Inter-company profits.
(c) Inter-company holding of capital stock.
(d) Minority stockholders' interests in stock and surplus.

5. If a company owns 40% of the stock in another company which it holds for investment purposes, should the first company take into account a part of the undistributed profits of the second company in preparing its balance sheet? Would your answer be the same if it were known that 40% constituted a practical control due to the wide distribution of the other shares?

6. A certain holding company owns 90% of the stock in a subsidiary. The subsidiary has an issue of first mortgage bonds outstanding. The assets are insufficient to meet payment on the bonds and the stock is worthless. How should the holding company show its stock holdings in the subsidiary on its balance sheet?

7. Company A purchased a controlling interest in the stock of Company B. Immediately thereafter company B fails to earn any profits beyond interest obligations. How should the stock be valued on the books of company A? How would a consolidated statement bring out the desired information?

8. Look up the reports of the American Telephone and Telegraph Company in one of the corporation manuals. You will find one balance sheet for the corporation and another headed "Bell System Balance Sheets, Duplications Excluded." Explain the differences between the items appearing in the two statements.

9. Draw up a form of work sheet which could be used in preparing a consolidated balance sheet.

10. "The elimination of inter-company transactions in the consolidated income sheet is not as important as in the consolidated balance sheet." Do you agree with this statement? What is the chief distinction between the two types of statements?

11. From the following trial balances, prepare a consolidated balance sheet and a consolidated income sheet:

Trial Balance December 31, 1925

Debits	*Company A*	*Company B*	*Company C*
Cash	$ 150,000	$ 50,000	$ 110,000
Accounts receivable	650,000	210,000	400,000
Notes receivable	400,000	150,000	150,000
Materials	500,000	180,000	290,000
Labor	430,000	350,000	350,000
Manufacturing expense	220,000	170,000	160,000
Selling and administration expense	150,000	90,000	140,000
Plant and machinery	1,000,000	600,000	800,000
Real estate	200,000	100,000	100,000
Dividends	450,000	100,000	200,000
Stocks of associated companies	2,500,000	....	....
Inventory, January 1, 1925	150,000	100,000	150,000
Total debits	$6,600,000	$2,100,000	$2,850,000
Credits			
Accounts payable	$ 150,000	$ 105,000	$ 360,000
Notes payable	50,000	95,000	90,000
Sales	1,500,000	1,100,000	1,200,000
Dividend income	300,000	....	....
Capital stock	4,500,000	500,000	800,000
Surplus, January 1, 1925	100,000	300,000	400,000
Total credits	$6,600,000	$2,100,000	$2,850,000

The inventories on December 31, 1925, were as follows:

A Company, $300,000; B Company, $150,000; C Company, $200,000.

Depreciation is estimated at 10% of plant and equipment for each company.

The inventory of B Company, December 31, 1925, includes goods purchased from the A Company on which the A Company made a profit of $25,000. The accounts receivable of the A Company includes $200,000 due from the B Company on goods sold by the former to the latter.

The A Company purchased all of the stock of B and C, paying $1,000,000 for stock in Company B and $1,500,000 for stock in Company C.

12. The following is a condensed balance sheet for the Demster Sales Company on December 31, 1924:

Assets		*Liabilities*	
Real est., bldgs. & equip.	$ 334,782	Capital stock	$1,000,000
Stock in asso. companies	1,225,000	Bonds	600,000
Notes receivable	85,500	Notes payable	31,740
Accounts receivable ...	19,980	Accounts payable	8,733
Cash	115,341	Sinking fund reserve ...	168,000
Deferred items	15,980	Accrued depreciation ..	78,300
Deficit	107,190	Res. for contingencies..	17,000
	$1,903,773		$1,903,773

What is the condition of this concern as shown by the balance sheet? What is the book value of the common stock? What additional information is needed to form a sound opinion as to the financial status of the concern?

13. The Demster Sales Company, whose balance sheet was given in the preceding problem, owns $1,225,000 (par value) of the stock of the Demster Manufacturing Company, half common and half preferred. The following is the balance sheet for the company on December 31, 1924:

Assets		*Liabilities*	
Land, bldgs., equipment	$ 463,122	Common stock	$ 650,000
Notes receivable	22,642	Preferred stock	650,000
Accounts receivable ...	34,314	Notes payable	9,500
Inventories	558,891	Accounts payable	8,009
Cash	55,750		
Deficit	182,790		
	$1,317,509		$1,317,509

(a) What is your opinion as to the solvency of the Demster Manufacturing Company?

(b) Prepare a consolidated balance sheet for the Demster Sales Company and its associated company.

(c) What is the book value of the stock in the Demster Sales Company?

14. An analysis of the books of the Demster Manufacturing Company (preceding problem) discloses the following facts: The fixed assets are overvalued by $59,000. The inventories are overvalued by $65,000. The preferred stock is 7% cumulative and no dividends have been paid in four years.

(a) Prepare a new balance sheet for the Demster Manufacturing Company.

(b) Prepare a new consolidated balance sheet for the Demster Sales Company giving effect to the information obtained in this problem.

(c) What is the book value of the stock in the Demster Sales Company as shown in the new consolidated balance sheet?

15. The following problem on consolidated statements is taken from the Ohio examination for Certified Public Accountant, given in May, 1922.

A, B and C are incorporated companies, intimately related and engaged in a similar line of business. In the early part of the year 1919 company A purchased in the open market 1000 shares of the Common Stock of company B, having a par value of $100 per share, for which it paid $150 per share. And on August 10, 1919, it purchased Preferred Stock of company B for which it paid $50,000, that being the par value of the stock then acquired.

On January 2, 1920, company A acquired 1000 shares of the Common Stock of company B, par value $100 per share, for

which it gave in exchange 2000 shares of its own Common Stock, having a par value of $100 per share. The rights to the dividend on the stock so acquired, payable January 10, 1920, were transferred to company A.

Balance Sheet, Company A, December 31, 1920

Capital stock, common		....	$700,000.00
Land		$ 40,000.00	....
Buildings		75,000.00	....
Machinery		100,000.00	....
Investments:			
Common stock B	$350,000.00		
Preferred stock B	50,000.00		
		400,000.00	....
Cash		49,500.00	....
Inventories		88,000.00	....
Accounts receivable		85,000.00	....
Accounts payable		....	51,500.00
Notes receivable Com. B	$10,000.00		
Notes discounted	10,000.00		
Accrued wages		....	8,000.00
Accrued taxes		....	6,000.00
Deferred charges		1,500.00	....
Dividends payable		....	35,000.00
Dividends receivable		31,750.00	....
Surplus		....	70,250.00
		$870,750.00	$870,750.00

The following is an analysis of the Surplus Account:

Jan. 1, 1920—Balance		$ 10,000.00
Jan. 2, 1920—Dividend preferred stock Com. B		1,750.00
Jan. 10, 1920—Dividend common stock Com. B		20,000.00
July 3, 1920—Dividend preferred stock Com. B		1,750.00
July 10, 1920—Dividend common stock Com. B		30,000.00
Dec. 31, 1920—Dividend preferred stock Com. B		1,750.00
Dec. 31, 1920—Dividend common stock Com. B		30,000.00
Dec. 31, 1920—Net profits for year		45,000.00
		$140,250.00
June 30, 1920—Dividend declared 5%	$35,000.00	
Dec. 31, 1920—Dividend declared 5%	35,000.00	
		70,000.00
Dec. 31, 1920—Balance		$ 70,250.00

Company B owns 900 shares of the Common Stock of company C, par value $100 per share, for which it paid $125 per share. This stock was acquired on January 1, 1920, without right to dividend declared on December 31, 1919, and payable on January 10, 1920. The capital stock of company C outstanding on January 1, 1920, amounted to $100,000.00.

Balance Sheet Company B, December 31, 1920

Capital stock, common	....	$200,000.00
Capital stock, preferred 7%	....	100,000.00
Land	$ 25,000.00	....
Buildings	50,000.00	....
Machinery	75,000.00	....
Cash	46,100.00	....
Inventories	47,500.00	....
Accounts receivable	66,500.00	....
Investment, 900 shares C stock	112,500.00	....
Dividends receivable	5,400.00	....
Deferred charges	800.00	....
Accounts payable	....	36,500.00
Notes payable (to Company A)	....	10,000.00
Accrued wages	....	3,000.00
Accrued taxes	....	2,000.00
Dividends payable	....	33,500.00
Surplus	....	43,800.00
	$428,800.00	$428,800.00

Analysis of the Surplus Account shows the following:

Jan. 1, 1920—Balance		$ 65,000.00
June 30, 1920—Dividend Company C 6%		5,400.00
Dec. 31, 1920—Dividend Company C 6%		5,400.00
Dec. 31, 1920—Net profits for year		35,000.00
		$110,800.00
June 30, 1920—Dividend common 15%	$30,000.00	
June 30, 1920—Dividend preferred 3.5%	3,500.00	
Dec. 31, 1920—Dividend common 15%	30,000.00	
Dec. 31, 1920—Dividend preferred 3.5%	3,500.00	67,000.00
Dec. 31, 1920—Balance		$ 43,800.00

Note: Dividends on the preferred stock of Company B are payable on January 1 and July 1, and on the common stock, January 10 and July 10.

Balance Sheet Company C, December 31, 1920

Capital stock	....	$100,000.00
Land	$ 10,000.00	....
Buildings	15,000.00	....
Machinery	20,000.00	....
Cash	28,000.00	....
Accounts receivable	46,500.00	....
Inventories	34,000.00	....
Deferred charges	500.00	....
Accounts payable	....	32,500.00
Dividends payable	....	6,000.00
Accrued wages	....	1,500.00
Accrued taxes	....	1,000.00
Surplus	....	13,000.00
	$154,000.00	$154,000.00

Analysis of Surplus Account shows the following:

Jan. 1, 1920—Balance		$ 15,000.00
Dec. 31, 1920—Profits for year		10,000.00
		$ 25,000.00
June 30, 1920—Dividend declared 6%	$6,000.00	
Dec. 31, 1920—Dividend declared 6%	6,000.00	
		12,000.00
Dec. 31, 1920—Balance		$ 13,000.00

Note: Dividends are payable on January 10 and July 10.

From the given data you are required to submit a Consolidated Balance Sheet, showing the minority interests. Submit your working sheet so that it may be seen how you arrive at your figures. The Balance Sheet may be shown on the working sheet, as the arrangement of the items thereon is not essential in this particular case. Show clearly how you arrive at the Goodwill and Surplus.

XXXI. INCOME TAX QUESTIONS AND PROBLEMS

1. "Although the income tax assessments are computed upon net income as determined by book accounts, the net income figure does not usually coincide with amount reported in the regularly prepared income sheet." Explain why there should be a discrepancy between the net income reported for income tax purposes and that reported on the business statements.

2. "The partnership organization is recognized under the income tax law merely as a basis for obtaining information." Why is the partnership treated in a different manner than the corporation? In what way is the information obtained from a partnership used?

3. Certain types of incomes are exempt from the income tax because of constitutional provisions. State specifically what incomes are so exempt.

4. Explain what is meant by gross income as the term is used in the income tax law.

5. What is the distinction between the term "deduction" and the term "credit"?

6. Distinguish between the "cash method" and the "accrual method" of reporting income for tax purposes.

7. The terms as defined in the latest income tax law (1924) are the same as those in the earlier laws as applied to individuals. The chief differences in the various acts lie in the rates to be applied and the personal credits to be allowed. State in general the regulations pertaining to rates and personal credits in the present law. What individuals are required to file returns?

8. Dividends received from corporations are reported as gross income and as credits. What effect does this have on the amount of tax on such income?

9. Stock dividends received from corporations are excluded from gross revenue. Give arguments supporting the contention that stock dividends do not constitute income to the recipient.

10. Under what conditions must a partnership file an income tax return? Does the amount of gross or net income determine the liability to file a return?

11. Under what conditions must a fiduciary file a return and in what form is such a return made?

12. What special provisions prevail in connection with the tax as applied to capital gains?

13. What are the provisions with respect to donations made by an individual? A partnership? A corporation?

14. The following information covering the finances of R. N. Biebler for the year 1924 is submitted as a basis for his personal income tax return. Secure an income tax blank and fill out the proper return.

Mr. Biebler's income included the following:

Salary from the Times Courier Company of which he is president, $4,500. Interest on bonds of the Stone Reality Company on which the normal tax is paid at the source, $844. Dividends on the stock of the Times Courier Company, $360.

He also conducts a retail store. A summary of the cash book for the year in this business shows the following:

Receipts

Cash balance January 1	$ 6,000
Receipts	500,000
	$506,000

Disbursements

Amount paid on merchandise invoices	$286,500
Employees wages	65,000
General expenses	62,500
Taxes	1,200
New fixtures purchased	6,000
	$421,200

On December 31, accounts receivable amounted to $25,000; notes receivable to $4,000; accounts payable $10,500; notes payable, $5,000; and accrued expense items unpaid, $1,500.

The inventory at the beginning of the year was $55,000 and at the end of the year was $45,000. The notes payable outstanding on January 1, 1924, were $3,500; the accounts payable were $12,500; the accounts receivable were $27,500; and the notes receivable were $5,000.

During the year he sold a piece of real estate for $35,000. This was purchased in 1910 for $15,000 but was worth $20,000 March 1, 1913. He paid taxes on the real estate during the year amounting to $450.

His contributions during the year were as follows: Community chest, $150; church, $300; to a college, $1,000.

His income tax for 1923 paid in 1924 amounted to $15,875.

Mr. Biebler is married and lives with his wife and two small children. His wife has no separate income.

15. What special provision is made for "earned" income? How much of Mr. Biebler's income, preceding problem, was of this type?

16. How do the rates on incomes of corporations differ from those of individuals? Does the amount of income determine the corporation's liability to file a return? What corporations are liable?

17. Explain what is meant by the "relief" provision with respect to credits in the case of a corporation having a net income in excess of $25,000 but less than $25,250. Give an illustration.

18. How are bonus payments paid to employees treated in the corporation income tax return?

19. What are the conditions under which a consolidated return may be required? What special ruling has the treasury department made with respect to this matter?

20. The Jaspers Manufacturing Company submits the following information on which to prepare an income tax return for the year 1924:

Trial Balance December 31, 1924

Office expenses	$ 32,840	....
Accounts receivable	180,105	....
Accounts payable	....	$ 42,500
Notes receivable	35,000	....
Notes payable	....	172,700
Bonds	....	250,000
Buildings	225,000	....
Worthless accounts written off	7,850	....
Capital stock	....	400,000
Dividends paid	18,000	....
Discount on sales	14,700	....
Freight	14,395	....
Finished goods, January 1	34,320	....
Cash	51,850	....
General expenses	14,770	....
Goods in process, January 1	13,250	....
Factory expenses	22,200	....
Interest on bonds	9,375	....
Taxes (state and local)	6,500	....
Taxes (Federal income)	10,900	....
Labor	329,012	....
Liberty Bonds, 4ths	195,000	....
Machinery and equipment	181,560	....
Patent rights	30,000	....
Raw materials, January 1	36,950	....
Raw materials purchases	555,700	....
Repairs	17,925	....
Interest on liberty bonds	....	8,288
Reserve for depreciation	....	37,336
Reserve for uncollectible accounts	....	8,000
Real estate	150,000	....
Sales expenses	36,749	....
Sales	....	1,200,615
Salaries	49,100	....
Surplus	....	153,612
	$2,273,051	$2,273,051

The inventories at the end of the year were as follows: Raw materials, $25,400; goods in process, $36,405; finished goods, $60,900. An allowance for uncollectible accounts amounting to 5% of the outstanding accounts is to be made. Depreciation on all fixed assets except real estate is to be figured at 5%. One-

tenth of the patent rights are to be amortized. Accrued taxes (state and local) amount to $1,500. Accrued interest on bonds amounts to $3,000.

Obtain an income tax return blank for a corporation and fill out in proper form.

XXXII. ACCOUNTING AND THE LAW

1. "Goodwill is a consistent record of earnings over a large period of years derived from a large number of customers."

"Goodwill is that intangible asset of an established business which is developed by efficient dealing or by the exercise of some advantage such as location or monopoly, and which increases the value of the business by giving assurance of exceptional earnings."

"Where the locality of a business premises makes the trade, goodwill represents the advantage derived from the chance that customers will frequent the premises in which the business will be carried on; that where the business is one which depends upon the reputation of a firm, the goodwill consists of the advantage which the owner derives from being allowed to represent himself as such, that where the value of the business is due to the individuality of the owner, and where its reputation cannot be separated from his, the goodwill is all but non-existent; and where the value of the business depends on its business connections, the goodwill consists of the right to be properly introduced to those connections."

Criticize.

2. "Independently of this development of a recognition of goodwill through an extension of the law of contract, there has come about, by a development of the concept of property, a tendency to recognize intangible assets as a type of property."

Explain how goodwill has been recognized through an extension of the law of contract.

For what particular purposes does it seem necessary and expedient to recognize the existence of goodwill?

3. "When an individual or a firm or a corporation has gone on for an unbroken series of years conducting a particular business, and has been scrupulous in fulfilling every obligation, so careful in maintaining the standard of the goods dealt in, so absolutely fair and honest in all business dealings that customers

of the concern have become convinced that their experience in the future will be as satisfactory as it has been in the past, while such customers' good report of their own experience tends continually to bring new customers to the concern, there has been produced an element of value quite as important as—in some cases, perhaps, far more important than—the plant or machinery with which the business is carried on. That it is property is abundantly settled by authority, and, indeed, is not disputed. That in some cases it may be very valuable property is manifest. The individual who has created it by years of hard work and fair business dealing, usually experiences no difficulty in finding men willing to pay him for it if he be willing to sell it to them."

Washburn v. National Wall Paper Company, 81 Federal Rep. 20.

Read the case cited.

4. "Goodwill in legal parlance is used to include a great deal more than in business parlance."

Wherein does the legal and business parlance differ in respect to goodwill?

5. "There is a distinct and increasing recognition of the business facts of goodwill and other intangible assets."

See Von Au v. Magenheimer, 100 N. Y. Supp. 659, affirmed (1909) 196 N. Y. 510; In the matter of Skillman, 105 N. Y. Supp. 872 (121 App. Div. 202), affirmed (1908), 190 N. Y. 560; In re Moore, (1916) 97 N. Y. Misc. 238; Wylie v. Camping Co., (Mont.) 187 P. 279.

6. "Goodwill is property and may have an independent value without reference to tangible property or locality, and stock of a corporation may be issued for it."

See Washburn v. Wall Paper Company, 81 Fed. 17.

7. "English courts have adopted an arbitrary rule of limiting the value of goodwill to one year's purchase of the net annual profits, calculated on an average of three years."

See Beav. 453; 75 L. T. Rep. 371; Von Au v. Magenheimer, 115 App. Div. 84, 100 N. Y. Supp. 659; Moore v. Rawson, 199 Mass. 493, 85 N. E. 586.

8. "Goodwill is a legitimate asset where it is actually existent, but it must not be something unsubstantial and shadowy but capable of pecuniary estimation."

See Camden v. Stuart, 144 N. S. 104 (1892).

9. "The fact that the auditor was of the opinion that the property was of less value than the parties contracted to pay for it will not justify the court in reducing the price which the parties to the contract had agreed upon."

See National Bank of Union Point et al v. Amoss et al and vice versa, 144 Ga. 425.

10. "Very many of the troublesome questions involved in the partnership branch of the law depend for their answer on whether what is called the entity theory of partnership, or the so-called aggregate theory be adopted."

What differences would there be in our partnership accounting if we were to adopt the entity theory of partnership?

11. "Legal recognition of the corporation, however, does not necessarily involve freedom from liability on the part of the members."

See Donovan v. Puttell, 216 Ill. 629, 1 L.R.A.N.S. 176.

12. "Regular books of account accurately kept by a managing partner should show accurately the conditions of the firm, and be always open to inspection by partners."

See Benedetto v. DeBocco (W. Va.), 99 S.E. 170.

13. In order to be admissible in evidence, accounts must be kept in a regular manner.

Look up the law.

14. "It is difficult for us to see on what theory plaintiff (a stockholder) was denied the right to inspect the original record, stock, and transfer books, and the record of the financial condition of the company."

Read Ellsworth v. Dorwart, 95 Iowa 108.

15. A check must be presented for payment within a reasonable time after indorsement and delivery.

Read Gifford v. Hardell, 88 Wis. 538.

16. "Depreciation as an element in cost of service was definitely upheld by the United States Supreme Court in a leading case, and has been followed in most later cases."

See Smyth v. Ames, 169 U.S. 466; Cumberland Tel., etc., v. Louisville, 187 Fed. 637; Ins. Co. v. Anderson, 263 Fed. 527; Whittaker v. Amwell National Bank, 58 N. J. Eq. 400; Conville v. Shook, 24 N. Y. Supp. 547.

17. "Prudence would require that each year a certain reasonable sum be laid aside as a replacement or upkeep fund for such contingencies as are not covered by the ordinary maintenance charges."

See People ex. rel. Jamaica Water Supply Co. v. Tax Commissioners, 128 App. Div. (N.Y.) 13.

18. "Accounting is based on cost and realized values, not on arbitrarily written-up values."

See La Belle Iron Works v. The United States.

19. Do the courts recognize allowances for depletion?

See Von Baumbach, collector, v. Sargent Land Co., 242 U.S. 503; Stratton's Independence, Ltd. v. Howbert, 231 U.S. 339, and Forty Fort Coal Co. v. Kirkendall, collector, 233 Fed. 704.

20. "The inventory value of machinery may properly include its cost of installation in the factory."

Whittaker v. Amwell Nat. Bank, 52 N.J. Eq. 400.

21. When a company is dissolved and there are unpaid common stock subscriptions on the books, can these subscriptions be collected in order to pay off obligations?

Look up the law.

22. "One who receives stock as full paid without paying for it occupies the position of a subscriber who has not paid his subscription."

Read See v. Heppenheimer, 61 Atl. 859.

23. Is a stock dividend legitimate when the company has a large accumulated surplus?

Williams v. Western Union Telegraph Co., 93 N.Y. 190.

24. "The board of directors declares the dividends, and it is for the directors, and not the stockholders, to determine whether or not a dividend should be declared."

See Schell v. Alston Mfg. Co., 189 Fed. 439.

It is a well recognized principle of law that the directors of a corporation, and they alone, have the power to declare a dividend of the earnings of the corporation, and to determine its amount.

Read Dodge v. Ford Motor Co., 204 Mich. 459.

25. "The general rule, even in the absence of any statute on the subject, is that dividends, in a going concern, can be properly declared and paid only out of profits, and not out of capital, or assets required for the security and payment of creditors."

See Davenport v. Lines, 72 Conn. 118.

26. "Where the word dividend is used without qualification or explanation it signifies dividends payable in money."

See Lancaster Trust Co. v. Mason, 152 N.C. 660.

27. "Unless restrained by statute or charter, the directors may, in their discretion, declare a dividend payable in specific property."

See Williams v. Western Union Tel. Co., 93 N.Y. 162.

28. "Directors of a corporation may, in their discretion, issue a scrip dividend."

See Choffee v. Rutland R. Co., 55 Vt. 110.

29. "The real principle upon which the employee is restrained from making use of confidential information which he has gained in the employment of some other person is that there is in the contract of service subsisting between the employer and employee an implied contract."

What is the character of the implied contract?

See Essex Trust Company v. Enwright, 214 Mass. 507.

30. Lindley, L. J., in (1895) 2 Ch. 673, defines the accountant's duties to be in substance: "To ascertain and state the true financial condition of the company, and his duty is confined to that. He must take reasonable care to ascertain

that the books show the company's true financial condition. But he does not guarantee that the books do correctly show the true position of the company's affairs; or that his balance sheet is accurate according to the books. He must use reasonable care and skill, under the circumstances, before he believes that which he certifies is true; where suspicion is aroused, more care is necessary."

Discuss.

31. A machine tool concern desires to manufacture a new type of machine. It will need a special kind of steel for this purpose.

The accountant, acting also in the capacity of purchasing agent, can obtain this steel in lots of 5,000 tons or more. The concern needs only 200 tons, so it would be useless to purchase 5,000 tons. The accountant, on his own initiative, buys 5,000 tons, supplies his own concern with 200 tons, and sells the remainder to an automobile concern at a very large profit. The machine tool concern brings suit against the purchasing agent.

What are the rights of the parties? Can the machine tool company recover damages? If so, to what extent?

32. 1. The accountant of A company has been known to buy and sell on the stock exchange.

2. The accountant of the B company frequents the race tracks, and bets on the races.

3. The accountant of the C company frequents road houses. Occasionally, while in such establishments, he gambles at cards.

4. The accountant of the D company plays golf on Sunday. He has, on occasions, made small wagers on the course.

An organization which has bonded each of these accountants reports them to their employers. In each case they are discharged. Each sues for the recovery of his wages up to the end of the year. The accountant of the A company gets a new position before the year has elapsed, but at a less salary. The accountant of the B company makes a conscientious effort to get a new position but is unsuccessful. The two other accountants make no effort whatsoever to obtain employment.

What are the rights of the parties?

See Pearce v. Foster, 17 Q.B. Div. 536.

33. Can a partnership be dissolved by the consent of one of the partners before the time limit for the partnership has expired?

See Karrick v. Hannaman, 168 U.S. 328.

34. "Agreement to share losses is implied where partnership contract is silent on the subject."

See Channing v. Graham (Okl.), 178 P 676; Gardner v. Conn, 34 Ohio St. 187.

35. "Where no definite arrangement is made between partners as to a division of profits, the presumption of law is that they are to be equally divided."

See Frazer v. Linton, 183 Pa. 186, 38 Atl. 589.

36. "The better view is that although all or a large part of the capital is furnished by one partner, the entire loss is to be borne by all."

See Whitcomb v. Converse, 119 Mass. 38.

37. "Contracts for labor and material, unaided by special provision of the contract or statute, stand on no higher ground than other simple contract creditors, and are no more entitled to the income than the latter creditors."

Read Drennen v. Mercantile Trust and Deposit Co., 115 Ala. 592.

38. Stock dividends were declared non-taxable in 1920. See Eisner v. Macomber, 250 U.S. 189.

39. "If the dividend consists of stock other than the corporation's own issue, taxable income is the result."

See U. S. v. Phillis, 257 U.S. 156.

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